1900.

QUEENSLAND.

ROYAL COMMISSION ON ACCIDENTS IN COAL MINES.

REPORT

OF

THE ROYAL COMMISSION

APPOINTED TO

Inquire into and Report upon the Nature and Cause of a Disastrous Accident which Occurred at the Torbanlea Colliery on the 21st March, 1900, and also Concerning the Occurrence of Inflammable Gas in the Mines Situated on the Burrum and Ipswich Coal Fields;

TOGETHER WITH THE

MINUTES OF PROCEEDINGS, MINUTES OF EVIDENCE TAKEN BEFORE THE COMMISSION, AND APPENDICES.

COMMISSIONERS:—

WILLIAM HENRY RANDS, Esquire, Chairman.

W. FRYAR, Esquire | T. GLASSEY, Esquire, M.L.A.

W. RANKIN, Esquire | L. THOMAS, Esquire.

S. HODGEN, Secretary.

PRESENTED TO BOTH HOUSES OF PARLIAMENT BY COMMAND.

BRISBANE:
BY AUTHORITY: EDMUND GREGORY, GOVERNMENT PRINTER, WILLIAM STREET.

1900.

C. A. 22—1900.

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ACCIDENTS IN COAL MINES COMMISSION.

MINUTES OF THE PROCEEDINGS OF THE COMMISSION.

TUESDAY, 17 *APRIL*, 1900.

The Commission met at the Geological Survey Office, Brisbane, at 10 a.m.

PRESENT:

Mr. W. H. Rands | Mr. T. Glassey, M.L.A.
Mr. W. Fryar | Mr. W. Rankin

Mr. L. Thomas.

Mr. William Henry Rands, Chairman.

The Chairman presented the Commission issued under the hand of His Excellency the Lieutenant-Governor and the Great Seal of the Colony constituting and defining the objects of the Commission.

Commission read by the secretary, and ordered to be recorded.

A letter was read from the Under Secretary to the Chief Secretary, intimating that His Excellency the Lieutenant-Governor in Council had been pleased to appoint Mr. Samuel Hodgen to be secretary to the Commission, in lieu of Mr. J. C. Collins, resigned.

It was resolved that application be made to the Chief Secretary for a shorthand writer to assist in reporting the evidence.

A letter was read from the Under Secretary to the Chief Secretary, stating that the fee for attendance payable to the unofficial members of the Commission would be two guineas per day for each day on which the Commission met for the purpose of the inquiry, and that travelling expenses at the rate of one guinea per diem would be paid to all members for each day on which the Commission was absent from Brisbane.

The Commission deliberated as to the mode of procedure to be adopted in the prosecution of their investigations, and it was decided that they should first visit and inspect the coal-mine at Torbanlea, in which the recent accident occurred, and then take evidence on the spot touching the nature and cause of the said accident; that they should afterwards inspect the other mines on the Burrum Coal Field, and then examine all available witnesses in the locality on the general question of the occurrence of inflammable gas in coal-mines in that district; and that, when they had concluded their labours there, they should return to Brisbane, and thence proceed to Ipswich, and make similar inspections and inquiries regarding the mines on the Ipswich Coal Field.

The secretary was instructed to advise the manager of the Torbanlea Colliery of the proposed visit of the Commission to that coal-mine.

It was decided that the Commission should proceed to Maryborough by the 7·53 a.m. train on Monday, the 23rd instant, and to Torbanlea on the following day.

It was agreed that the short title of the Commission should be the "Accidents in Coal Mines Commission."

WILLIAM H. RANDS, Chairman.

TORBANLEA, TUESDAY, 24 *APRIL*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin

Mr. Thomas.

Mr. William Henry Rands, Chairman.

The Commission having, pursuant to arrangement, travelled to Maryborough on the 23rd instant, proceeded to-day to Torbanlea, where a meeting was held for the transaction of business.

The minutes of the previous meeting were read and confirmed.

The Commission visited the Torbanlea Colliery, descended the mine, and examined the workings and the exact place where the recent explosion occurred, and found no trace of inflammable gas in the mine, notwithstanding that the usual artificial means of ventilation were not in operation at the time of their inspection.

A letter was read from Mr. W. T. Jones, of Howard, addressed to the Minister for Mines, and forwarded by the Mines Department to the Chairman of the Commission. The writer stated that the fan at the Torbanlea Colliery was removed before four practical miners went down to examine the mine for the purpose of the statutory inquiry. It was decided that Mr. Jones should be given an opportunity of offering any evidence he wished when the Commission visited Howard.

A letter was read from the Under Secretary to the Chief Secretary, intimating that the Principal Shorthand Writer had been requested to issue instructions for a member of the *Hansard* staff to accompany the Commission, and assist in reporting the evidence.

A letter was read from the Under Secretary to the Chief Secretary, forwarding cheque book and cash book for the use of the Commission; and one from the Secretary to the Railway Commissioner, enclosing free passes for members and officers of the Commission, and stating that a first-class compartment would be reserved for the Commission in the 7·53 a.m. train to Maryborough on the 23rd instant.

Ordered—That the following witnesses be summoned for to-morrow, namely:—James Robertson, John Sharp, John Caldwell, Daniel Roderick, John Tench, John McKinnon, and Robert Ritchie.

WILLIAM H. RANDS, Chairman.

TORBANLEA, WEDNESDAY, 25 APRIL, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin

Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

It was decided that the inquiry should not at any time be open to the general public, but that representatives of the Press should be admitted during the taking of evidence, but not when the Commission were deliberating.

The following witnesses were examined:—James Robertson, proprietor of the Torbanlea Colliery; and John Sharp, manager of the Torbanlea Colliery.

Ordered—That the following witnesses be summoned for to-morrow, namely:—Samuel Dawson, Neil Bonner, William Warren, and William Warren, junr.

WILLIAM H. RANDS, Chairman.

TORBANLEA, THURSDAY, 26 APRIL, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin

Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

A letter was read from the Under Secretary for Mines, forwarding, for the information of the Commission, the evidence taken at the inquiry held by Warden Morey into the accident at the Torbanlea Colliery on the 21st of March last, together with the opinion of the four experienced miners who sat with the warden at the inquiry, and the Report of the Inspector of Mines on the accident.

The following witnesses were examined:—John Caldwell, overman at the Torbanlea Colliery; John McKinnon, certificated mining manager; and John Tench, an ex-miner.

Ordered—That the following witnesses be summoned for to-morrow, namely:—Andrew Anderson, Joseph Irons, Thomas Irons, John Ambler, Richard Foith, William Warren, senr., Frank D'Arcy, and William Carroll.

WILLIAM H. RANDS, Chairman.

TORBANLEA, FRIDAY, 27 APRIL, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin

Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

The following witnesses were examined:—Daniel Roderick, miner; Robert Ritchie, miner; Frank D'Arcy, engine-driver at Torbanlea Colliery; Andrew Anderson, labourer at Torbanlea Colliery; Joseph Irons, miner; Thomas Irons, filler and wheeler; John Ambler, miner; Richard Foith, miner; William Warren, miner; and William Jones, miner.

The Commission decided to visit and inspect the Riverbank Colliery, Burrum, on Monday next, the 30th instant.

WILLIAM H. RANDS, Chairman.

HOWARD, MONDAY, 30 *APRIL*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

The Commission visited and inspected the Riverbank Colliery, Burrum.

It was decided to inspect the Queensland Collieries Company's mines, Howard, on the following day.

Ordered—That the following witnesses be summoned to attend and give evidence at Howard on Wednesday next, namely:—William Keene, overman, Riverbank Colliery; H. Pritchard, miner, Burrum; P. McKenna, underground manager, Howard; George Barker, miner, Howard; John Flint, miner, Howard; W. T. Jones, miner, Howard; John Sharp, colliery manager, Burrum; William Carroll, miner, Burrum; John McKinnon, certificated mining manager, Howard; and Daniel Roderick, miner, Howard.

WILLIAM H. RANDS, Chairman.

HOWARD, TUESDAY, 1 *MAY*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

The Commission visited and inspected the mines of the Queensland Collieries Company, Limited, at Howard.

WILLIAM H. RANDS, Chairman.

HOWARD, WEDNESDAY, 2 *MAY*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

The following witnesses were examined, namely:—John Sharp, colliery manager, Burrum; John McKinnon, certificated mining manager, Howard; Daniel Roderick, miner, Howard; William Carroll, miner, Burrum; William Thomas Jones, miner, Howard; and William Keene, overman, Burrum.

Ordered—That the following witnesses be summoned for the following day, namely:—Dr. Smyth, Howard; William Whitworth, miner, Howard; E. Gambie, labourer, Howard; Alfred Whitworth, miner, Howard; and Mr. Griggs, miner, Torbanlea.

WILLIAM H. RANDS, Chairman.

HOWARD, THURSDAY, 3 *MAY*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

The following witnesses were examined, namely:—George Barker, miner, Howard; John Flint, miner, Howard; Henry Pritchard, miner, Burrum; Patrick McKenna, underground manager, Queensland Collieries, Howard; Sydney Richard Smyth, medical practitioner, Howard; Elias Gambie, labourer, Howard; William Whitworth, miner, Howard; Alfred Whitworth, miner, Howard; Sarah Jane Gambie, widow of the late Amos Gambie, Torbanlea; Frances Emma Rothwell, sister-in-law of Sarah Jane Gambie, Brisbane; and John Gannon, miner, Howard.

The Commission decided to hold their next meeting at Parliament House, Brisbane, at 10 a.m. on Tuesday, the 8th instant.

WILLIAM H. RANDS, Chairman.

BRISBANE, TUESDAY, 8 *MAY*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

The Commission decided to visit Dinmore on the following day, and inspect the Dinmore Colliery and the Whitwood Colliery; also, if time should permit, the New Chum Colliery, and the Ebbw Vale Colliery.

The secretary was instructed to write to the managers of the Dinmore and Whitwood Collieries, advising them of the intended visit of the Commission.

WILLIAM H. RANDS, Chairman.

DINMORE, WEDNESDAY, 9 *MAY*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The Commission proceeded by the 7·30 a.m. train to Dinmore, and there inspected the Dinmore Colliery, the property of the New Swanbank Company, Limited, and the Whitwood Colliery, afterwards visiting the New Chum Colliery, which it was found was not being worked at present.

It was decided to visit and inspect the Aberdare Colliery, Blackstone, on the following day, and the secretary was instructed to advise the manager to that effect.

WILLIAM H. RANDS, Chairman.

IPSWICH, THURSDAY, 10 *MAY*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The Commission drove out to Blackstone, and there inspected the Aberdare Colliery No. 3 Shaft.

It was decided to visit and inspect the West Moreton Colliery and the Swanbank Colliery Blackstone, on the following day, and the secretary was instructed to advise the managers of the said mines of the intended visit of the Commission.

WILLIAM H. RANDS, Chairman.

IPSWICH, FRIDAY, 11 *MAY*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The Commission drove out to Blackstone, and there inspected the West Moreton and Swanbank Collieries.

It was decided to visit and inspect the Waterstown and Eclipse Collieries on Tuesday, the 15th instant, and the secretary was instructed to advise the managers of the said mines of the intended visit of the Commission.

WILLIAM H. RANDS, Chairman.

XIX.

IPSWICH, TUESDAY, 15 *MAY*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin

Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the four previous meetings were read and confirmed.

The Commission drove out to Tivoli, and there inspected the Waterstown Colliery, visiting the Tantivy Colliery *en route*.

It was decided to visit and inspect the Eclipse Colliery on the following day, and the Caledonian Colliery, Walloon, on Thursday afternoon, and the secretary was instructed to advise the managers of the said mines of the intended visit of the Commission.

Ordered—That the following witnesses be summoned to attend and give evidence on Thursday forenoon, namely:—Jonathan Shields, Thomas Johnson, and Richard Bassitt; and that the following be summoned for Friday, namely:—L. D. Llewellyn, Henry Harris, John Potts, William Neilson, John Stafford, George Burford, John Mortimer, Alexander Orr, William Morris, Robert Lindsay, and Thomas Woolley.

WILLIAM H. RANDS, Chairman.

IPSWICH, WEDNESDAY, 16 *MAY*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin

Mr. Thomas.

Mr. William Henry Rands, Chairman.

The Commission drove out to Tivoli, and there inspected the Eclipse Colliery, after which they visited the Rothwell Haigh Colliery.

WILLIAM H. RANDS, Chairman.

IPSWICH, THURSDAY, 17 *MAY*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin

Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the two previous meetings were read and confirmed.

Owing to the bad state of the weather, the Commission decided to postpone their intended visit to the Caledonian Colliery, Walloon, to a future date.

The following witnesses were examined, namely:—Thomas Johnson, manager of the Waterstown Colliery; Jonathan Shields, miner; and Michael Jeffrey, manager of the New Chum Colliery, Dinmore.

WILLIAM H. RANDS, Chairman.

IPSWICH, FRIDAY, 18 *MAY*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin

Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

The following witnesses were examined, namely:—Llewellyn David Llewellyn, manager of the Dinmore Colliery; Henry Harris, colliery manager, Dinmore; John Potts, miner, New Swanbank Colliery; William Neilson, miner, New Chum Colliery; John Stafford, joint owner of Whitwood Colliery, Dinmore; George Burford, miner, Dinmore; and John Mortimer, miner, Dinmore.

Adjourned till 10 a.m. on Tuesday, the 22nd instant.

WILLIAM H. RANDS, Chairman.

IPSWICH, TUESDAY, 22 MAY, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin

Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

The following witnesses were examined, namely:—Alexander Orr, chairman of directors of Aberdare Colliery Company, Limited; William Leigh, manager of Aberdare Colliery No. 3 Mine; William Morris, inspector in Aberdare Colliery No. 3 Mine; Thomas Woolley, manager, New Swanbank Colliery; Samuel Clarkson, miner, New Swanbank Colliery; James Hindley, miner, New Swanbank Colliery; Robert Lindsay, manager, West Moreton Colliery; Allen Brown, manager, Eclipse Colliery James Evans, miner, Eclipse Colliery; and William Barnes, miner, Eclipse Colliery.

It was agreed that managers summoned to attend as witnesses should be paid £1 1s. per diem for expenses, and working miners 10s. per diem.

The Commission decided to inspect the Caledonian Colliery, Walloon, on the afternoon of Friday, 25th instant, weather permitting.

WILLIAM H. RANDS, Chairman.

IPSWICH, FRIDAY, 25 MAY, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin

Mr. Thomas.

Mr. William Henry Rands, Chairman.

Pursuant to arrangement made at the last meeting, the Commission left Brisbane by the 12·55 p.m. train for the purpose of visiting and inspecting the Caledonian Colliery, Walloon, but as it was raining heavily on their arrival at Ipswich they did not proceed further on their journey.

WILLIAM H. RANDS, Chairman.

BRISBANE, SATURDAY, 26 MAY, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin

Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the two previous meetings were read and confirmed.

A letter was read from Mr. Henry Harris, colliery manager, Dinmore, suggesting certain amendments in sections 195, 199, 200, and 214 of "*The Mining Act of* 1898."

The Commission decided to visit and inspect the Caledonian Colliery, Walloon, on the afternoon of Monday next, the 28th instant, weather permitting.

WILLIAM H. RANDS, Chairman.

WALLOON, MONDAY, 28 MAY, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin

Mr. Thomas.

Mr. William Henry Rands, Chairman.

The Commission proceeded by train to Walloon, and there inspected the Caledonian Colliery, and examined John Hunter, the manager of the colliery.

WILLIAM H. RANDS, Chairman.

IPSWICH, TUESDAY, 29 *MAY*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The Commission travelled by train to Ipswich, and thence drove out to Tivoli, and there inspected the Waterstown Colliery, where an explosion of gas had taken place on the previous day, resulting in the burning of a miner named Thomas Bootle. Owing to a fall, the Commission were unable to reach the exact spot where the accident occurred, but got to within a few yards of the place.

Ordered—That the following witnesses be summoned to attend at the Court House, Ipswich, on the following day to give evidence concerning the accident, namely:—Llewellyn David Llewellyn, Richard Johnson, Edward Roberts, and Thomas Ferrier.

WILLIAM H. RANDS, Chairman.

IPSWICH, WEDNESDAY, 30 *MAY*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the three previous meetings were read and confirmed.

The Chairman reported that, in accordance with the wish of the Commission, he and Mr. Rankin, accompanied by the secretary, had visited Thomas Bootle at the hospital that morning with a view to obtain from him some information concerning the accident by which he was burnt in the Waterstown Colliery on Monday last, but that the man was in a very low condition, and suffering a great deal, and did not seem inclined to answer any question with reference to the accident.

A letter addressed by the Chairman to the Honourable the Chief Secretary, applying for one month's extension of time to enable the Commission to conclude their labours in a satisfactory manner, was read and approved.

The following witnesses were examined, namely:—Llewellyn David Llewellyn, Assistant Inspector of Mines; Richard Johnson, underground manager at the Waterstown Colliery; Edward Roberts, miner, Waterstown Colliery; and Thomas Ferrier, engineer, Waterstown Colliery.

WILLIAM H. RANDS, Chairman.

BRISBANE, THURSDAY, 31 *MAY*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

The Commission deliberated upon the form of their report, and it was then agreed that the Chairman should prepare a Draft Report for consideration at the next meeting, the date of such meeting to be fixed by the Chairman on the completion of his Draft Report.

Ordered—That the Opinion of the Four Experienced Miners who sat with Warden Morey at the Statutory Inquiry into the accident at the Torbanlea Colliery be printed as an appendix to the proceedings of the Commission.

WILLIAM H. RANDS, Chairman.

BRISBANE, WEDNESDAY, 20 *JUNE*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

A letter was read from the Under Secretary to the Chief Secretary, intimating that His Excellency the Governor in Council had been pleased to extend the time for the return of the Commission to the 30th June instant.

A letter was read from the Under Secretary to the Chief Secretary, stating, in reply to an application from the Commission, that a further sum of £100 had been made available for expenditure in connection with the Commission.

The Chairman presented his Draft Report, which was considered paragraph by paragraph as far as the last clause but one of the section dealing with the accident at the Torbanlea Colliery.

WILLIAM H. RANDS, Chairman.

BRISBANE, THURSDAY, 21 *JUNE*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

The Commission resumed and concluded their consideration of the Draft Report, and agreed to certain amendments thereupon.

WILLIAM H. RANDS, Chairman.

BRISBANE, FRIDAY, 22 *JUNE*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

The Commission deliberated upon the Draft Report as amended at the previous meeting, and adopted the same with further verbal amendments.

The Commission further deliberated as to the recommendations they should make in their Report.

Adjourned till Tuesday, 26th instant, at 11 a.m.

WILLIAM H. RANDS, Chairman.

BRISBANE, TUESDAY, 26 *JUNE*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

The Chairman presented Draft Recommendations for the consideration of the Commission.

The Commission deliberated, and agreed to the Recommendations with amendments.

Adjourned till Thursday, 28th instant, at 11 a.m.

WILLIAM H. RANDS, Chairman.

BRISBANE, THURSDAY, 28 *JUNE*, 1900.

PRESENT:

Mr. Rands | Mr. Glassey, M.L.A.
Mr. Fryar | Mr. Rankin
Mr. Thomas.

Mr. William Henry Rands, Chairman.

The minutes of the previous meeting were read and confirmed.

The Commissioners signed the Report.

An honorarium was voted to the Secretary, and to his colleague, Mr. Bernays, for their services in connection with the Commission.

The Commission decided to place on record their high appreciation of the valuable services rendered by the Secretary, Mr. S. Hodgen, and of the courteous and able manner in which he had performed his duties.

A vote of thanks was unanimously accorded to Mr. Rands for the unvarying courtesy and marked ability he had displayed in the discharge of his arduous and responsible duties as Chairman of the Commission.

The Chairman subsequently waited upon the Premier and handed him the Report of the Commission.

WILLIAM H. RANDS, Chairman.

COMMISSION.

VICTORIA, by the Grace of God of the United Kingdom of Great Britain and Ireland, Queen, Defender of the Faith, &c., &c., &c.

To Our Trusty and Well-beloved WILLIAM FRYAR, Esquire, Inspector of Mines; THOMAS GLASSEY, Esquire, a Member of the Legislative Assembly of Our Colony of Queensland; WILLIAM HENRY RANDS, Esquire, Government Geologist of Our said Colony; WILLIAM RANKIN, Esquire; and LEWIS THOMAS, Esquire.

Greeting:

WHEREAS a Disastrous Accident has recently been occasioned at the Torbanlea Colliery in Our Colony of Queensland by an explosion of inflammable gas, and it is considered by the Lieutenant-Governor of Our said Colony in Council expedient and necessary that inquiry should be made into the nature and cause of the said Accident, and also concerning the occurrence of inflammable gas in the Mines situated on the Burrum and Ipswich Coalfields in our Colony aforesaid: Now therefore know Ye, that We, reposing especial trust and confidence in your zeal, knowledge, learning, industry, discretion, and ability, do by these presents, by and with the advice of Our Executive Council of Our said Colony, constitute and appoint you, the said WILLIAM FRYAR, THOMAS GLASSEY, WILLIAM HENRY RANDS, WILLIAM RANKIN, and LEWIS THOMAS, or any three or more of you, to be Our Commissioners for the purpose of inquiring concerning the premises: And We do hereby require and enjoin you to make diligent inquiry into the matters aforesaid: And We do furthermore command and enjoin you to summon before you and to examine all such persons as may appear to you able to inform you concerning the premises, and to take down the Evidence of the several Witnesses that may appear before you, and reduce the same into writing, and such Evidence, together with a full and faithful Report touching the matters aforesaid, and such recommendations as you or any of you shall think fit to make concerning the same, to transmit to the Office of Our Chief Secretary of Our said Colony, on or before the Thirty-first day of May, one thousand nine hundred.

And We do hereby appoint you, the said WILLIAM HENRY RANDS, to be Chairman of Our said Commission.

And We do hereby appoint JOHN CHARLES COLLINS to be Secretary to Our said Commission.

In testimony whereof, We have caused this Our Commission to be sealed with the Seal of Our said Colony.

Witness Our Trusty and Well-beloved The Honourable Sir SAMUEL WALKER GRIFFITH, Knight Grand Cross of Our Most Distinguished Order of St. Michael and St. George, Lieutenant-Governor of Our said Colony and its Dependencies, at Government House, Brisbane, this eleventh day of April, in the year of Our Lord One thousand nine hundred, and in the sixty-third year of Our reign.

(Signed) S. W. GRIFFITH.

By His Excellency's Command,

(Signed) ROBERT PHILP.

Chief Secretary's Office,
Brisbane, 12th April, 1900.

His Excellency the Lieutenant-Governor, with the advice of the Executive Council, has been pleased to appoint SAMUEL HODGEN to be Secretary to the Commission appointed to inquire into the nature and cause of a recent accident at the Torbanlea Colliery, and also concerning the occurrence of inflammable gas in the mines situated on the Burrum and Ipswich Coalfields, in the room of J. C. Collins, resigned.

ROBERT PHILP.

1900.

QUEENSLAND.

ROYAL COMMISSION ON ACCIDENTS IN COAL MINES.

REPORT.

To His Excellency the Right Honourable CHARLES WALLACE ALEXANDER NAPIER, Baron Lamington of Lamington, in the County of Lanark, in the Peerage of the United Kingdom, Knight Commander of the Most Distinguished Order of St. Michael and St. George, Governor and Commander-in-Chief of the Colony of Queensland and its Dependencies.

May it please Your Excellency,—

The Commissioners, whose signatures are hereunto subscribed, having been appointed by a Commission bearing date the 11th day of April, 1900, issued under the hand of His Excellency the Lieutenant-Governor, and the Great Seal of the Colony, to inquire into the nature and cause of a disastrous accident which occurred at the Torbanlea Colliery, through an explosion of inflammable gas, on the 21st of March last, and also concerning the occurrence of inflammable gas in mines situated on the Burrum and Ipswich Coal Fields, and having made a searching investigation into the matters set forth in the said Commission, have now the honour to present their Report to Your Excellency.

A preliminary meeting of the Commission was held in Brisbane on the 17th April, when it was decided to visit the scene of the accident at Torbanlea Colliery, and afterwards to take evidence on the spot.

Accordingly the Commission proceeded to Maryborough on the 23rd April, and on the following morning went to Torbanlea, and made a close inspection of the workings of the colliery in the locality where the accident occurred, with the view of forming their own conclusions as to the cause of the explosion. They were conducted over the workings by Mr. John Sharp, the manager, and Mr. John Caldwell, the overman and fireman.

The Commission then sat at Torbanlea for three days, during which fourteen witnesses were examined.

The Commission next inspected the Riverbank Colliery at the Burrum, and the Queensland Collieries Company's Mine, Howard; and afterwards sat two days at Howard, examining seventeen witnesses.

Having completed their work on the Burrum Coal Field, the Commission proceeded to the Ipswich Coal Field, where they inspected the surface machinery and the underground workings of eight collieries, and the surface machinery of three others. They sat at Ipswich four days, and examined twenty-four witnesses. One witness was also examined at Walloon Colliery.

An accident from the explosion of fire-damp on Monday, the 28th May, at the Waterstown Colliery, which unfortunately resulted in the death of a miner named Bootle, on Saturday, the 2nd June, rendered a second visit to that colliery imperative, and witnesses were examined as to the occurrence and cause of the casualty.

BURRUM COAL FIELD.

TORBANLEA COLLIERY.

The Torbanlea Colliery is situated about 14 miles in a north-easterly direction from Maryborough, and about 2 miles south-east of the Burrum River.

The main, or No. 3 Shaft, is situated nearly a mile west of the Maryborough-Bundaberg Railway Line, and is connected therewith by a private branch line.

The shaft is 350 feet in depth to the Torbanlea Seam of Coal.

The area of the property is 700 acres, and in addition to this 140 acres are leased on royalty from an adjoining proprietor. The sinking of No. 1 Shaft was commenced by Mr. James Robertson, the present owner, in the year 1882, and the first coal was sent away in March of the following year. The present No. 3 Shaft was sunk in the year 1886. Some twelve or thirteen years ago the mine was purchased by the Isis Investment Company, and was worked by them for several years, but on the 1st January last Mr. Robertson resumed possession from the liquidator of that Company.

The Burrum Seam was the first to be worked in No. 1 Shaft at a depth of 110 feet. This seam, however, was soon abandoned on account of its quality, for the Torbanlea or Lapham Seam, which was passed through in the shaft 30 feet higher up, and this bed of coal has been worked ever since. The seam is very similar to that in the Burrum Mine, but is on the average much thicker, sometimes going to 6 feet, but divided by a band of from 6 to 18 inches in thickness.

Description of Workings.—The workings where the explosion occurred are reached by a main level from the shaft at a depth of 350 feet, running in a north-westerly direction for a distance of about 700 yards. At this point a fault was met with which throws down the coal about 110 feet, and a stone-drift about 66 yards in length, was put in to cut the coal on the north-western side of this fault. On meeting with the coal again a pair of levels was driven from which the coal has been worked to the rise and to the dip.

The "dip" or inclined plane, which is 88 yards from the stone-drift, was driven for a distance of 220 yards when the fault was met with, which comes round, as shown on the Plan (Appendix No. IV.), thus unexpectedly limiting greatly the amount of coal that could be won from this part of the mine.

The coal has been worked out over an area of about 100 yards by 50 yards on the south-eastern or right-hand side of the "dip," but very little coal has been taken from the other side of the "dip," as it is of an inferior quality.

The system of working is that known as stoop and room, or pillar and stall. The rooms are 7 yards in width and 30 yards in length, leaving pillars between 14 yards in width, which are afterwards taken out. At the time of the accident the last of the pillars were being taken out, and the Commission were informed that it was the intention of the management to close the mine in a few more days.

Examination of Mine.—It had been the custom ever since February, 1896, the date of the accidents to two miners named Ritchie and Keene, to have all the working places in the colliery examined by a fireman in the morning before the men were allowed to go to work. This examination was invariably made with a safety lamp, and a chalked mark, showing the date of the examination, was placed upon a shovel or on the face of the coal to show the miners that their working places had been duly examined.

The miners were kept at an appointed "station" until the fireman reported to them that the working places were safe. A report of the examination was entered daily in a book kept for that purpose in the office at the surface.

In addition to this the manager examined the mine at least two or three times a week, and once a week wrote a report as to the condition of the mine, machinery, and plant.

Naked lights have always been used throughout the mine, both in working in the whole coal and in taking out the pillars, except on one occasion for a few days only, when gas had been seen in taking out pillars, just against a fall, at the fault, close to the bottom, and on the right-hand side of the dip.

VENTILATION.—In addition to the natural ventilation, which the Commission, on their visit to the mine, had an opportunity of seeing was fairly good at a time when all artificial ventilation had been stopped for five weeks, a fan with a capacity of about 16,000 cubic feet of air per minute was kept going at the upcast shaft. Unless it was thought necessary for any reason to run the fan, it was stopped at night and during Sundays. No daily register was kept of the quantity of air passing through the different parts of the mine, nor was any indicator attached to the fan to indicate the work it was doing; it was simply run at so many revolutions per minute.

No complaints appear to have been made to the management with reference to the ventilation.

OCCURRENCE OF GAS.—From the evidence it appears that no inflammable gas was met with in the workings in No. 1 Shaft. The first appearance of gas was about ten years ago in the main level from No. 3 Shaft. The gas in this level was, so far as the evidence discloses, found only in small quantities, although two men were burnt, in the first case only slightly, in the second (Ritchie) more severely.

Inflammable gas was first met with in the mine in any quantity after passing through the stone drift, and it appears to have emanated chiefly either from the fault, or from the disturbed strata and coal in the neighbourhood of the fault, more especially from the fault and coal at the bottom of the main dip.

Gas was also met with in driving the levels from the end of the stone drift, and it was here that Keene met with the accident in 1896 that cost him his life. Gas was continually seen while driving these levels, but not quite so much was met with in driving the main dip or engine plane, or in the working places and waste on the right-hand side of the dip.

By far the largest amount of gas met with in the mine was given off from a break at the foot of the dip, and from falls which occurred after stripping the fault for about 20 yards up. Gas was almost continuously coming off from the break and fault here, and owing to this fact, and also to the badness of the roof, the bottom pillars were abandoned. Although it is possible that gas may have accumulated here, the evidence goes to show that it is probable it would have gradually drained off into the return air-way, the steep inclination of the seam rendering it improbable that any large cavity existed in the roof.

A large area of coal was left untouched on the right-hand side of the dip between the fault and the most south-easterly pillars. A fall occurred in the 100-yards level to the right of the dip, between 30 and 40 yards from where the men who were killed on the 21st March were working; but the evidence goes to show that no gas ever accumulated in this fall.

PREVIOUS ACCIDENTS FROM BURNING.—*Accident to John Madders.*—The first accident from inflammable gas, occurring at Torbanlea, was to a miner named John Madders, in the year 1890. The part of the mine in which it occurred was in the main or horse-level. Very little information was forthcoming as to the cause of this accident, but the injury sustained by Madders was evidently very slight as he was back at work on the day following its occurrence.

Accident to Robert Ritchie.—The next accident from inflammable gas took place on Sunday, the 9th of February, 1896, at 9 p.m. The man who worked the shift preceding Ritchie's had knocked off on the Saturday night, when all was safe. The accident took place near the main horse-road, about 100 yards from the shaft. An overcast was being constructed over the horse-road, and it was in a small blind shaft in a little seam of coal above the main seam that the gas accumulated, and the explosion occurred. Previously to that Ritchie had seen no gas in the place. Ritchie was very severely burnt, and was laid up for seven weeks.

Accident to David Keene.—An accident occurred on the 26th February, 1896, to a miner named David Keene, from which he died two days afterwards. The explosion of gas occurred in a cut-through between the pair of levels which was being driven inside the fault, at a point about 2 chains from the end of the stone drift. Keene was roadsman and fireman at the time. The trap-door between the two levels, which conducted the air round into the bottom level, had been left open, and the current of air thus passed straight into the return instead of going round to the end of the levels. Keene finding the door opened closed it, and then went along the bottom level with a naked light and met the gas which had evidently accumulated in the upper level while the door had been left open, and which was then being carried along by the ventilating current. The gas exploded and Keene was badly burnt. The quantity of gas that had accumulated does not appear to have been very great, judging from the force of the explosion, as another man named Redmond, who was close to him at the time, and who had the presence of mind to lie down, was only slightly burnt on one arm. A Clanny lamp was always hanging on the top side of the door for the use of the men. Keene, however, told the manager after the accident that, thinking the door had been left open for a few minutes only, he did not think it necessary to use the safety-lamp.

The Accident of the 21st March, 1900.—No accident from the ignition of inflammable gas occurred between the date of that to Keene and the deplorable explosion on Wednesday, the 21st March, 1900, by which five miners lost their lives. The names of the victims were:—Alexander Houston, John Houston, James Johnston, Frederick Stephen Griggs, and Amos Gambie.

The following appear to be the facts with reference to this accident so far as they can be deduced from the evidence taken before the Commission:—Up to the Saturday previous to the accident the Houstons and others had been working in a level on the left-hand, or return, side of the dip. On the Monday morning they were removed to the right-hand, or intake, side to take out the pillars where the accident occurred. The manager distinctly states that this removal was ordered because the road was beginning to crush, and not because of foul air or insufficient ventilation. There is, however, a discrepancy in the evidence on this point, as the overman states that the reason for removing the men from that point was that the air was getting pretty well charged with gas coming from the fault at the bottom of the dip, owing to a stopping having been crushed. The working places were examined at about 6 o'clock in the morning by John Caldwell, the overman and fireman, with a safety-lamp before the men entered, and were reported by him as safe. The cavity in the roof formed by the fall in the 100-yards level was also examined and found to be free of gas.

The Commission have it in the evidence of John Caldwell that he examined the workings a second time that day, about a quarter of an hour before the accident occurred, and he states, when speaking of this examination, that he went down to the particular place where Houston was working and examined it, and that he then left his light with Houston and went with a safety-lamp through the old workings and examined them, and that he found the mine all clear, just as it was in the morning. On the day of the explosion there were sixteen men in the dip workings—namely, the five deceased, who were working out a pillar next to, and on the right-hand side of, the dip; the overman and a boy, who were in a level on the left-hand side of the dip and immediately opposite to where the explosion occurred; and nine men in a level 20 yards higher up on the right-hand side of the dip. The engineman and one or two others were in the level at the top of the dip.

At the time of the explosion the overman was in charge of the mine, in the absence of the manager, who was away at the Riverbank Colliery.

From the evidence of the overman, who was not many yards from the place, it appears that the explosion occurred at about 1 p.m., and that the first thing he heard was a rumbling noise followed almost immediately by a rush of air, and by the flame. The flame hovered over him and the boy for a second or two, and then went out. On feeling the rush of air, he said to the boy, "The gas is lit; lie down." He also heard the men crying out, and one of them saying, "Put it out," and then,

"Jack is burnt," meaning the younger Houston. Caldwell and the boy got up to the top of the dip in the dark, where they met D'Arcy, the engineman, and two or three others. Gambie, one of the injured men, had already found his way up the dip. After the engineman had got some safety lamps which were kept in the engine-room, he, with three others, went to the rescue of the other four men, Caldwell waiting at the door of the dip to show them the light. John Houston was the first to be rescued, and he was soon followed by Johnston, and then Alexander Houston. Griggs was the last to get to the top of the dip, being brought up by the manager and the overman about half-an-hour after the explosion occurred.

Considering the position of the men, the time occupied in rescuing them seems rather excessive. This, doubtless, was partly due to the over-excitement of the rescuers at the time of the occurrence, and partly to the heat and the choke-damp and dust in the dip.

The injured men, after being attended by Dr. Robertson, of Maryborough, and Dr. Smyth, of Howard, were taken by special train to the Maryborough Hospital.

The evidence of the men working in the upper level does not throw much light on what occurred at the time of the explosion. A grating or rumbling sound was heard by some of them immediately before the explosion, while others state they heard no noise at all. Immediately after the explosion there was a rush of heated air and dust in the level. A boy named T. Irons, working with his father near the door in this level, about 10 yards from the main dip, was slightly burnt on his back, the injury keeping him from his work for two days.

Violence and Extent of Explosion.—In judging as to the quantity of gas that caused the explosion, the Commission have been guided to a great extent by the evidence as to the violence of the explosion, and the area over which it extended.

The evidence goes to show that the explosion was not a particularly violent one. Two or three empty wagons standing in the dip just where the explosion occurred were not shifted, the trap-doors in the dip and to the left of the dip were uninjured, so also were the props. Some canvas which had been put up instead of a door lower down the dip was ripped off, and that was the only apparent injury done.

The overman and the boy Anderson, who were not many yards from the locality of the explosion, felt no shock or violence.

It is evident, however, that the violence of the explosion, as would naturally be the case, was greater in ascending the dip, as the door in the upper level was thrown violently open, and the witness, W. Warren, was knocked over when lying on his side at the end of that level. At the engine in the level at the top of the dip D'Arcy's (the engineman's) light was put out, and he was turned round and lifted over the drum, which was about 3 feet 6 inches in height above where he was standing, and received a small cut on the back of his head. A boy turning some wagons in the same level was also knocked down.

With reference to the extent of the explosion, the Commission are of opinion that it was confined to a very limited area. The overman and the boy Anderson, who were only from 8 to 10 yards away on the opposite side of the dip, and in the return air-way, were uninjured. The men in the upper level from 20 to 40 yards distant were also uninjured, with the exception of the boy Irons, who was very slightly burnt. It seems probable, therefore, that the amount of gas exploded was not large.

Occurrence of Gas and Examination of the Mine after the Explosion.—The scene of the accident, and the old fall in the 100-yards level, were visited by the manager and the overman on the 22nd March, the day following the explosion. No signs of inflammable gas were met with. No increase in the size of the fall in the 100-yards level was noticed, but the overman states that such could have occurred without being seen by them.

The mine was next inspected on the 4th April, or a fortnight afterwards, by the four experienced miners who sat with the warden at the statutory inquiry. At the time of this visit the fan had been stopped for a week, and the natural ventilation also had been cut off by the leaving open of the door in the main level. Two visits were paid to the mine that day—one in the morning and another in the afternoon. In the morning the working place where the accident occurred was examined, and no inflammable gas was discovered in it, but it was found that gas had accumulated behind the door in the dip, some few yards above where the men were working, and that it gradually tapered off down to the working place itself.

At the second visit the upper level and the 100-yards level were inspected, and no gas was found in either of them. The air-way from the upper level was found to be blocked by a fall, which had not previously been seen. This fall must, therefore, have taken place between the morning of the 21st March and the 4th April, but there is no evidence as to the exact date. The extent of the fall is about 18 yards square, and it forms a continuation of the old fall so often alluded to. No gas was detected in the neighbourhood of the fall, though it was tested with a safety-lamp as high as a man could reach.

The conclusion arrived at by the four jurors was that the gas was forced out at the time of the accident by this fall, but from where they do not state, and no reason is given for their opinion, as can be seen from the document itself, which is printed as Appendix No. I. to this Report.

The final visit to the mine was made by the members of the Commission on 24th April, when the fan had stopped working for four weeks. Before entering the dip, the Commissioners were provided with safety-lamps. They proceeded cautiously down the dip, where a certain amount of creep had set in, to the place in which the victims were working at the time of the accident, and made a careful examination of the place and its surroundings, and no sign of gas was met with either in the dip or in the working place. The floor was cracked and upheaved, but there is no evidence to show exactly when this took place.

The Commission then proceeded further down the dip until they were stopped by water, which was rising in the workings, and no sign of gas was seen anywhere during their inspection.

Origin of the Gas that Caused the Explosion.—There is no direct evidence as to the place from which the gas issued that caused the explosion, and any conclusion arrived at by the Commission on that point is purely on indirect or circumstantial evidence.

The places from which there is any possibility of the gas having come, are:—

1. *From the fault at the foot of the dip.*—This place has already been referred to as that from which the exudation of gas has been most frequent, and at which there have been more falls of roof than in any other portion of the dip workings. It is stated, however, that the gas has never been forced back by these falls into the upper part of the dip workings, but has been carried off safely by the current of air into the return air-way. Both the manager and the fireman affirm that it was impossible, in the face of the current of air, which was equal to 14,000 cubic feet per minute, for the gas to have been forced from this point to the place where the Houstons were working, a distance of about 100 yards. Mr. Tench, one of the four jurors, in answer to a question on this subject, said:—"Had the gas been forced from the bottom of the dip against the air, my experience is that there was enough to turn the thing inside out, but we thought it impossible for it to come from there." Considering the ventilating current passing through the workings, it seems impossible that the gas could have emanated from the bottom of the dip, and have been forced back against that current without causing a far more serious disaster than that which occurred; moreover, a large percentage of the gas disengaged from the dip would have travelled along the return air-way to where the overman and the boy were situated.

2. *From the waste or gob to the right hand of the dip.*—The area of the waste to the right is very limited, being only about 100 yards by 50 yards, and most of these old workings were sufficiently open to render a daily examination possible. The seam of coal has an inclination of about 1 in 3½, so that any gas accumulating in the waste would have an opportunity, on account of its lightness, of draining off. Several witnesses were examined with reference to the occurrence of gas in this portion of the mine, and all agree that little or no gas had been seen there.

3. *From the coal in the pillars being worked out.*—This source of the gas scarcely needs argument, as it is next to impossible that isolated pillars, which had been cut through in places, would retain sufficient gas to cause the accident.

4. *From the fall above the* 100*-yards level.*—This seemed at first sight a very probable source of the gas, but the facts brought out in the evidence make it difficult to understand how it could have come from here. Both the manager and the overman declare that in the whole of their examinations they never met with a trace of gas in the fall; and the latter, in speaking of the first fall in this level—and he was there at the time it took place—says:—"It caused a great current of air to go through the pit—in fact, it bumped the doors; but there was no gas with it. After the fall I sent to the engine-room for my lamp and I went as far into the fall as I could get, and could not find anything. Then I went to the top and never got any gas." Now, as the second fall, whenever it may have taken place, is simply a continuation of the first, what grounds are there for anticipating that it should force out inflammable gas? If the gas had come from here, it seems unlikely that the nine men in the upper level should have escaped, or that the explosion should have been confined to such narrow limits. Then, with reference to a fall taking place at the time of the accident, had there been a large fall, such as the one that has taken place, 18 yards square, or thereabouts, would it not have made a much louder noise, and have caused a greater rush of air? The overman states that he heard a rumbling noise a second or two before the explosion, but Anderson, the boy with him, heard no noise at all. W. Warren, who states that he was only 10 to 15 yards from the fall by the air-way, heard a grating sound and then a crash like a fall, but that, judging by the sound it made, it would not be a very big fall, and that he took very little notice of it. He felt no rush of air until the explosion occurred. J. Irons also states that he heard no fall, and that he must have heard it if there had been a big fall in the 100-yards level. What he heard was more of a rush or roar, a very different noise to what would have been made by a fall. The other men in that level appear to have heard either no noise at all, or only a rumbling or rushing noise.

5. *From the floor in the working-place where the victims were working.*—Another possible source of the gas is the bottom coal, which is here 2 feet below the floor. This coal is covered by an impervious bed of fire-clay, in the middle of which is a hard ironstone band that requires blasting. The manager—Mr. Sharp—states that "there is very little gas in the top coal, it generally came from the bottom coal. Down the dip the bottom coal is not so good, so that there is a great possibility that the gas may have come from the floor, owing to the bottom being burst up by the weight of the roof" on the pillars. In his Weekly Report Book, however, reference is many times made to gas having been discovered, but only on two occasions does he mention where the gas came from. Mr. Sharp has formed no definite opinion as to the place from which the gas came in this instance. He says, "It is a mystery to me; I cannot understand it; I really cannot explain it at all." The overman throws very little light on the subject; he states that he has seen gas issuing from the floor, but never in sufficient quantity to cause such an explosion.

When the Commission visited the spot, the floor was slightly upheaved and cracked; and this was first noticed by the manager and the overman in going round the workings with the four experienced miners on 4th April, so that here again, as in the case of the second fall, there is no direct evidence to show when it occurred, except that it must have taken place between the morning of the 21st March and the 4th April. If the gas came from the floor this would account for the limited space over which the explosion extended, for the gas would in that case be suddenly liberated right in their midst, and, on account of its lightness, ascend to the top or face of the working place, where, the evidence goes to show, it was exploded by John Houston.

Reviewing the whole circumstances of the case the Commission have arrived at the conclusion that there is no evidence to prove conclusively to them from what place the gas emanated.

The Commission, after a very full and careful consideration of the evidence, are of opinion that blame cannot be attached to anyone for the occurrence of the accident on the 21st March.

Since the closing of the Torbanlea Colliery after the accident, there have been only two mines at work on the Burrum Coal Field—viz., the Riverbank Colliery, previously known as the "Burrum," and the Queensland Collieries Company's Mine, Howard.

RIVERBANK COLLIERY.

This property is situated immediately south-east of the Burrum River. It was first worked by the late Hon. W. D. Walsh, about the year 1865, but very little was done for many years. The lease of the property, after passing through other hands, came into possession of the Isis Investment Company, and at the beginning of the present year was transferred to Mr. James Robertson.

The coal was first worked from a shallow shaft near the river bank, and about two years ago a new shaft was sunk more to the dip of the seam, cutting the coal at a depth of 250 feet, which has been worked on and off ever since. The output of the mine has been comparatively small, but now that operations have been suspended at Torbanlea, the present owner will have to concentrate his energies to the development of Riverbank.

The coal seam, which averages 3 feet 6 inches in thickness, is of a fairly good quality, and suitable for steam and gas. It is worked on the pillar and room system. The roof is not very good, being of a friable, shaly nature, but it is superior to that of the Queensland Collieries Company's Mine.

The ventilating current is produced by a fan, placed at a shaft to the rise. This fan was brought from Torbanlea, and had only been at work for a couple of weeks previous to the visit of the Commission. Before that a small furnace was in use to produce a current, and the ventilation was described as bad.

No inflammable gas has been seen in the portion of the mine at present being worked, and this fact probably has led to the bad custom, and one entirely against the law, of not examining the working places in the morning before the men enter.

Gas was often seen in a now abandoned level, running north-west from the shaft. The evidence shows that the gas was found "lying in cavities in the roof of the level, where the air could only brush on it under the roof." The gas was lighted once, but without any serious results.

QUEENSLAND COLLIERIES COMPANY'S MINE.

This mine is situated about a mile north of Howard, with which place it is connected by a branch railway. This is the oldest, and by far the most extensively worked property in the district. About twenty years ago a company was floated in England for the purpose of purchasing the properties and working the coal. Powerful engines and all the necessary working plant were imported, and work was commenced, therefore, under more favourable circumstances than at any other coal mine in the colony.

The coal was first worked from No. 1 Shaft; but the seam was thin, the roof very bad, and the floor used to heave up considerably.

The present working shaft, known as No. 5, cut a large seam of coal, which changed entirely the fortunes of the place.

The coal is worked on the combined systems of pillar and room, long-wall, and taking out the pillars.

The various sections of the mine are ventilated by different means—one part by a fan, the dip workings by a steam jet, and for a third section a furnace is being erected at the surface. The air never has far to travel, as shafts have been sunk at moderate distances apart. The roof is bad, and has to be timbered closely. Notwithstanding the bad roof, not a particle of gas has ever been seen in the workings from either shaft, a fact which may, perhaps, be accounted for by the good current of ventilation sweeping away any gas that may exude.

BEAUFORT AND DUDLEY COLLIERIES.

On the north side of the Burrum River several mines have been worked on a small scale. Reference was made to only two of these in the evidence taken by the Commission—viz., the Beaufort and the Dudley.

There are only two references in the evidence to the former mine, in which the witnesses state that they saw no inflammable gas, but that black-damp was often met with.

The Dudley Colliery is situated alongside the railway line, between the river and Howard. This mine was worked from about 1888 to 1892 by small co-operative partnerships of miners. The output was very limited, and the mine has been closed since the above mentioned date. Gas was seen in small quantities almost from the commencement of working on the coal to the finish, but was carried off by a comparatively small amount of ventilation. Naked lights and explosives were used without any accident occurring. It appears that the reprehensible practice of lighting the gas was indulged in, and on one occasion an explosion occurred, which is said to have knocked the man down, but did no further damage.

IPSWICH COAL FIELD.

Following is a description of the mines which were visited by the Commission in this district:—

DINMORE COLLIERY.

This mine is situated on the north side of the Brisbane-Ipswich Railway, about a mile west of Dinmore Station. The mine has been worked for the last seven or eight years, and has had a considerable output, but faults have interfered considerably with its regular working.

The shaft was sunk a depth of 250 feet to the seam of coal, but one of these faults occurring a few feet north of the shaft, it was found necessary to work the higher portion of the coal at a depth of 150 feet, at which depth it is being worked now.

The ventilation is effected by means of a furnace at the bottom of the upcast shaft which is circular in section. This form of shaft has its advantages over the usual rectangular shaft, whether as an upcast or winding shaft; and it is the form generally in use in the Old Country.

The seam being worked is known as the New Chum. It consists of a top coal of about 4 feet 8 inches, then a band of from 15 to 18 inches thick, and a bottom coal about 3 feet 6 inches in thickness. The coal is worked on the pillar and room system.

The mine is examined by a deputy with a naked light every morning before the men enter their working places, and naked lights are used in working the coal. No explosive gas has ever been seen in the workings; though the manager stated that gas was once met with in a small borehole, near the south-east corner of the property, and about a mile away from the pit, in what is believed to be the same seam. If such is the case, it is probable that gas may emanate from the seam where it is being worked, and it shows that, with good ventilation, such a seam can be worked for several years without even a trace of gas being detected.

STAFFORD BROTHERS' WHITWOOD COLLIERY.

This mine is the property of Messrs. Stafford Brothers, and it is situated on the opposite side of the railway, about half-a-mile from the Dinmore Colliery, last described. This colliery has the next largest output to Aberdare. The property

has been worked for about twelve years. Operations were commenced about a mile further to the west on a seam dipping under Bundamba Creek. The present shaft was afterwards sunk, and it cut the 4-feet seam at a depth of about 250 feet. This shaft was the winding, downcast, and upcast shaft for a time, until the tunnel, which now acts as the downcast, was driven to the workings.

The winding shaft is still an upcast, owing to steam-pipes being carried down it; but another shaft has been sunk not far from the former to carry off the heated air, and the working shaft should now become considerably cooler, and act as a downcast.

Several faults have been met with in working the coal. The system of working is pillar and room; the rooms being driven 7 to 8 yards wide, leaving pillars from 4 to 7, and in some cases 12 yards wide. The length of the pillars is from 60 to 70 yards, and they are holed through every 20 yards. The pillars are being taken out.

No explosive gas has ever been seen in the mine, notwithstanding that there is a large extent of waste, that the mine is always examined with naked lights, that the men work with naked lights, and that extensive gob fires exist. It appears that only the places in which the roof is not considered safe are examined before the men enter in the morning.

Although it was very hot near the bottom of the mine, the working places and levels were fairly well ventilated. Black-damp (carbonic acid gas) has often been noticed, but is easily removed by the ventilating current.

NEW CHUM OR BUNDAMBA MINE.

The Commission visited this mine, but could not go below as it was idle on account of a strike; they, however, examined the manager, who had been engaged there as a workman or manager for the last twenty-eight years. The mine is one of the oldest in the district, and a very large area of ground has been excavated. The seam has been worked from three or four tunnels and from three shafts, and also from the adjoining Ebbw Vale Shaft, near which a portion of the New Chum Coal was cut off by a fault. The New Chum Seam was cut in the present shaft at a depth of 218 feet.

The system of working is by pillar and room. The pillars and rooms are each 8 yards in width, except in the case of the pillars next to the levels, which are 20 yards in width. No pillars have yet been taken out, but it is intended to remove them when the workings reach the boundary.

The mine is ventilated by means of a furnace, and the ventilation has been generally good. One miner complained that there was some difficulty in getting bratticing when working in the face of levels or headings; but, when questioned as to how long it was since he had last asked for bratticing, he could not say.

No trace of gas has ever been seen in the mine.

ABERDARE COLLIERY.

This estate, which is the property of Mr. Lewis Thomas, and which is now being worked under royalty by a Co-operative Company of miners, is situated about three miles west of Ipswich, and about half that distance south of the Brisbane-Ipswich Railway. A branch line of railway has been constructed, along which the coal is conveyed, not only from Aberdare, but also from West Moreton, Box Flat, Bogside, and New Swanbank Collieries. It is now over thirty years since coal was first worked at Aberdare, and although for some time operations were carried on under difficulties, and the output was small, it is now the most productive mine in the colony.

The Aberdare Property embraces an area of between 600 and 700 acres, in addition to which a considerable area is leased from Mr. Ferrett's Booval Estate, the coal in which is being worked from the No. 3 Shaft.

The Aberdare Seam averages about 12 feet in thickness in all, and has a good roof. The bottom coal is about 7 feet 6 inches thick, with one band 6 inches thick; this is separated from the top coal by a band of 1 foot in thickness. Faults occur in the workings, but they are by no means so numerous as in other mines in the district visited by the Commission. The seam has been opened at several points by shafts and tunnels, but the latter have fallen into disuse, except in the case of one which is used to convey power to work an engine plane in the mine, and which can also be used as a travelling way in case of necessity.

There are at the present time two working shafts. The one visited by the Commission is known as the No. 3, or Coolgardie Shaft. The coal is as usual worked on the pillar and room system. The bottom coal is generally taken out before the top, though in one portion of the workings the top coal is being taken out first.

The ventilation in No. 2 Shaft is produced by a furnace, and in the Coolgardie Shaft by the exhaust steam from the pumps. The steam pipes are in the main winding shaft, which thus becomes the upcast; this is a bad principle, but in this case the difficulty apparently cannot be overcome without incurring considerable expense, either in removing the steam-pipes to another shaft, which would have to be sunk for the purpose, or by using compressed air instead of steam. The main dip is also an upcast, and in it and at the bottom of the shaft the air is very hot. There are only five men regularly employed in the heated portion of the mine. The walling in of the steam-pipes in the shaft and dip would most likely have the desired effect of cooling those places, and would be well worth a trial.

In other respects the mine is very well ventilated, and the current is split several times to feed the hundred and odd men usually at work.

Naked lights are used in the examination of the mine before the men enter their working places in the morning, but this provision of the Act has only of late been strictly carried out.

Not the slightest sign of explosive gas has been seen in the Aberdare Collieries during the whole time they have been at work.

Black-damp is plentiful, but no accident has occurred from this source, the current of air being always sufficient to carry it off.

The proprietors have experienced some difficulty with gob fires.

SWANBANK COLLIERY.

This mine has been worked for several years, and the proprietors have about 2,000 acres under royalties.

Two seams have been opened up, one of which had been worked only to a slight extent, and then abandoned for the lower and better seam. This latter seam, which was cut in the shaft at a depth of 167 feet, has an inclination of about 1 in 3 to 1 in 3½. The seam averages about 3 feet 6 inches in thickness, and has a good roof and floor.

The ventilation, which is only fairly good, is produced by a furnace, by steam pipes, and by the exhaust from the engine below ground.

No inflammable gas has ever been seen in this mine, and it has been very little troubled with black-damp. The mine is examined in the morning before the men are allowed to enter.

The coal is worked on the pillar and room system. The Commission are of opinion that if it could be worked to advantage by long wall, the ventilation would be greatly improved thereby.

WEST MORETON COLLIERY.

The West Moreton Property adjoins the Aberdare, and has been worked for some thirteen or fourteen years. The Aberdare Seam was cut in the shaft at 630 feet in depth; on driving on it to the dip, the inclination of the seam increased until it was about 1 in 2. A large dyke was encountered, gob fires broke out, and black-damp was plentiful, but no explosive gas has ever been seen in the mine.

These workings were dammed off and abandoned, and the shaft was then sunk to 928 feet in depth, when coal was met with, but it was so interstratified with bands that it could not be worked with profit. Another shaft was subsequently started further to the dip, which was put down in an igneous dyke, and had finally to be abandoned.

A small seam about 2 feet in thickness is now being worked under considerable difficulties, for, in addition to its smallness, it has a steep grade of about 1 in $2\frac{1}{2}$. This seam was first worked from the shaft at 160 feet in depth, but the present owners started a tunnel, which is now connected with that shaft, and the coal is worked therefrom.

No inflammable gas has ever been seen while working this seam, but here, again, the Section of the Act which provides that the working places shall be examined thoroughly every morning before the men enter has not been strictly adhered to.

The coal is worked by pillar and room, but it is a question whether the long-wall system would not render the ventilation more perfect.

BENNETT'S TANTIVY COLLIERY.

This is a very small affair, and the Commission only visited the surface. The coal, which appeared to be rather dirty, is either made into coke, or sold locally for household or smithy purposes.

ECLIPSE COLLIERY.

This colliery is situated in what is known as the North Ipswich Area. The owner, Mr. John Wright, is working two seams of coal, known respectively as the Eclipse and Tivoli. These seams have been worked for many years. The Eclipse Coal is being won by means of a tunnel, cutting through the strata at a high angle for a considerable distance before it strikes the seam, which dips at a low angle. The coal averages about 5 feet in thickness, with a band of from 8 to 10 inches, at 18 inches above the floor.

The coal is worked on the pillar and room system; the rooms are from 7 to 8 yards in width, leaving pillars of only 2 to 3 yards in width. The system of working would be improved by leaving wider pillars, and taking them out afterwards.

The workings are ventilated by a small fan, and the ventilation is fairly good, but a new shaft is being sunk to the dip which will make a great improvement in this respect.

The mine is examined every morning by a deputy with a naked light before the men are allowed to go down. No explosive gas has ever been met with in these workings.

The Tivoli Seam, which is 97 feet above the Eclipse, is also being worked from a tunnel. This seam is only 4 feet in thickness in all, and contains one band of from 10 inches to 1 foot in thickness, and another of about 1 inch. The ventilation, which is simply the natural ventilation produced by two shafts and a tunnel, is fairly good. No gas has been seen in these workings.

Mention was made of what was described as a "mere whiff of gas" in the old Eclipse Tunnel, which is now abandoned, and partly full of water.

ROTHWELL HAIGH COLLIERY.

This was formerly known as the Old Tivoli Mine. The property was first worked about thirty years ago by Mr. James Gulland. When Mr. Gulland ceased to work these mines they lay idle for some years until purchased by Messrs. Stafford Bros. two or three years ago. Since then two new tunnels have been driven, which have been connected with the old workings, and yet no explosive gas has been seen in either the old or new workings, notwithstanding the existence of several faults, which are so frequently met with in this neighbourhood.

The Commission did not go down the pit, but they found the machinery and top management generally fairly satisfactory.

CALEDONIAN COLLIERY.

This colliery is situated at Walloon, about 6 miles west of Ipswich, and is the property of Mr. John Wright. Mining operations have been carried on for the last fifteen or sixteen years, formerly by Captain John Reay, and latterly by Mr. Wright.

The mine is being worked from a tunnel, which is connected with what was the old winding shaft, but which is now used for ventilation.

The seam is about 3 feet 6 inches thick, with a band at the bottom. It is a hard clean coal, suitable for gas and household purposes. The coal is won by the pillar and room system, and the pillars have been, and were being removed at the time of the visit of the Commission.

The mine is examined by a deputy with a naked light every day before the men are allowed to enter, but only during the last few weeks have daily reports been entered in a book kept for that purpose. The mine is fairly well ventilated, and no explosive gas has ever been seen in the workings.

The manager was examined as to the plan of the mine, and from his evidence it appears that it is by no means up to date.

WATERSTOWN COLLIERY.

This colliery is situated in the North Ipswich Area. The property has been worked for very many years, and operations have extended to at least four seams. The mine bears the very unenviable notoriety of being nearly the only mine in the Ipswich District in which gas has been discovered, and the only one in which accidents have occurred from this source.

The Garden Tunnel, or the Garden Seam, appears to have been the first mine worked in this property. A miner named S. Clarkson informed the Commission that he started to work on that seam about eighteen or twenty years ago, that he frequently saw gas during the three years he was engaged at the mine, and that it was blowing off all the time, but not in sufficient quantity to cause an accident. Clarkson himself got slightly burnt under the following circumstances:—One shift of men had just left off, and he, after having a smoke with them, was the first man to enter the place about twenty minutes after they had left it, when the gas went off. His injury luckily was not sufficiently severe to render him unable to continue working. He was in the habit, it appears, of purposely lighting the gas himself in order, as he said, to clear out the gas more quickly.

An accident had occurred, some time previously to this, to a miner named Richard Bassitt, who was severely burnt, but no reliable particulars of this occurrence were forthcoming, Bassitt, who was summoned to attend as a witness, having failed to appear before the Commission.

When the shaft now in use was being sunk, a seam was passed through, but not developed, at a depth of about 260 feet. At 320 feet the Waterstown Seam—the one now being worked—was cut, and work was commenced on it. After some little progress had been made, a stone drift was driven to the upper seam, which was worked for some considerable time. Gas was given off regularly from this seam from the very start, though in no great quantity, as it was stated that it could not be detected when the ventilation was good. No accident from explosive gas occurred while working this seam.

The workings were examined in the morning before the men were allowed to enter.

Accident to John Ferrier.—In 1897 a "staple" or "blind" shaft was sunk to the Lower or Tivoli Seam, which lies 250 feet below the Waterstown Seam. Gas was met with at once when this seam was struck, and safety lamps were ordered to be used by the fireman in his daily examination of the mine; but notwithstanding this, no care seems to have been taken to carry the current of air by means of bratticing up to the face, with the result that the fireman, John Ferrier, within six weeks of the time that operations on the coal had commenced,

met with an accident which cost him his life. The particulars of the accident are as follows:—A room was up about 20 yards or so to the rise above the level, and they had to hole through a further 10 feet to meet the upper level. Ferrier tried to get into the room with a safety lamp in the morning, but failed to do so on account of gas, which he took to be black-damp. He then, in obedience to instructions from the manager, joined a miner in the upper level, who was holing through into the room from above. He did not stop there long, but returned to the room with a bag to brush out the gas, still under the impression that it was black-damp, and in doing so he wafted it down on his naked light, which he had placed on the floor. An explosion occurred, which burnt him severely, and he died in the hospital two days afterwards. Undoubtedly the accident was largely due to his carelessness; but had proper ventilation been carried up to the face of the room the accident would not have occurred, for when once they had holed through, and the ventilation could get round the workings, no more gas was seen, though the seam was worked for about twelve months after the accident.

The Commission visited the mine on the 15th May, and inspected the workings on the Waterstown Seam, which is the only one at present being worked. This seam is about 3 feet 4 inches thick, with small bands of stone, and it is being worked on the pillar and room system. The Commission found the arrangements underground almost as bad as they could be. The working places were hot and badly ventilated, indeed the system of ventilation was wretched. The air was vitiated and heated by being carried a long distance round the old workings to the right-hand of the dip before it came to the working places where the men were engaged; and as the management had trusted solely to porous "gobs" in the levels, and a few bags hung up in the dip, to divert the current of air along its proper course, most of it was dissipated before it reached the men.

The furnace created an ample current of air to have ventilated the mine well, had proper arrangements been made to conduct it round the workings; and the Commission are of opinion that had this been done it is more than probable that no gas would ever have been detected in the mine.

The travelling ways and levels are low, and most uncomfortable to travel along. In fact the mine has been badly managed in every respect.

Accident to Thomas Bootle on Monday, 28th May, 1900.—In taking evidence on the 17th May the Commission were informed that, with the exception of one slight instance in the main dip, no explosive gas had ever been seen since the operations on this seam had commenced; and yet on 28th of May an explosion occurred which resulted in the death of a miner named Thomas Bootle, and on the following day, the 29th, two of the Commissioners, Mr. Rankin and Mr. Glassey, went below, and found plenty of gas in the level above where the explosion occurred.

The Commission again visited the mine the day following the explosion. Mr. Fryar, in his capacity of Inspector of Mines, went down in the morning, and Mr. Rankin and Mr. Glassey in the afternoon, with the result referred to above.

The accident occurred near the face of the fourth room from the end of the bottom level, and about 80 yards up the room above that level.

The underground manager, Mr. R. Johnson, stated that he examined this portion of the mine in the morning, and that he found the roof "working" heavily, and the floor "heaving"; and it is exactly under such circumstances that gas might be expected. He stated, too, that, in consequence of this, he ordered the men working in this level to another part of the mine—namely, to the bottom of the dip; and this is confirmed by the evidence of a miner named Roberts, who was Bootle's mate, and who went to work in the dip accordingly.

It appears that Bootle and the underground manager went together along the level as far as the room, and sat listening to the creep going on. Bootle had left his tools in the room, and after a time, still against the wishes of the underground manager who was about to obtain a safety-lamp, he started up the room to

get them, and the underground manager followed, and was only 5 yards away from him when the gas fired. Admitting that Bootle disobeyed the orders of the underground manager, the discipline must have been very lax which would permit him to do so when actually in the presence of that officer.

The level had been driven to a fault, and the rooms were being driven up to it. It is a well known fact that there is likely to be an exudation of gas in the neighbourhood of faults. The Inspector of Mines, on his previous visit to the mine on the 10th April, evidently foresaw the danger of fire-damp being met with in this part of the mine, for in his report at the mine, bearing that date, he pointed out the probability of gas occurring near the fault. He advised the use of an uninjured and locked safety lamp in the examination of those workings in the mornings, and he also advised the manager to be specially careful on Monday mornings, after the mine had been left standing since the previous Saturday. These recommendations of the Inspector were totally disregarded by the management.

The Commission are of opinion that had these recommendations been carried out, or had even a decent current of air been carried round the working places, this deplorable accident would not have occurred.

OTHER COLLIERIES.

There are a few smaller collieries on the Ipswich Coal Field, which the Commission saw no necessity for visiting, having inspected all the more important ones, and having made themselves thoroughly acquainted with the general method of work pursued in the district.

GENERAL.

Summarising the fatal accidents that have occurred from explosions of fire-damp on the Burrum and Ipswich Coal Fields, and they comprise all that have happened in the colony, it is found that eight deaths in all have been caused by four separate explosions.

Very curiously these explosions have been confined to two collieries, one on each of the two above-mentioned fields; and in each of these mines there have been two fatal explosions.

At Torbanlea Colliery, on the Burrum Coal Field, the first explosion took place in 1896, and caused the death of one man, and the second on the 21st March of the present year, causing the death of five men.

At Waterstown Colliery, on the Ipswich Coal Field, the first explosion occurred in 1897, and the second on the 28th May of this year, and on each occasion one man lost his life.

Previously to this present year, which has been a most unfortunate one in respect of accidents of this character, there had been only two deaths from the explosion of inflammable gas in the whole of the collieries of this colony.

There has not been a single death, nor even a serious accident, from this cause in any of the other collieries; and it is only in a very few of these mines that any explosive gas at all has been detected, and then in small quantities. This fact has probably given rise to the carelessness, or, at any rate, to a proper want of caution, in the working of many of the collieries, which the Commission has found to prevail.

It is difficult with the very limited output of coal in Queensland to institute any comparison with respect to the occurrence of accidents from inflammable gas, with other Colonies, with Great Britain, or the Continent of Europe. It has been already shown that up to the year 1896 no fatal accident had occurred from this cause, and that up to the end of last year there had been only two deaths; so that in the last half-year the total number of deaths has been increased fourfold. In New South Wales and New Zealand the fluctuations in the proportion of deaths has also been very great. In Great Britain the output of coal, and the number of men employed, are so great that the proportion of accidents, from any particular cause, remains nearly stationary, though there has been a great reduction in the death-rate from accidents since the system of inspection of mines commenced, and managers of a higher standard have been employed.

From the beginning of the year 1860 up to the end of the year 1899 the total output of coal in this Colony was 5,658,919 tons, and if 250,000 tons are added to this amount as the return for the first half of the present year, the total output to date is 5,908,919 tons. So that whereas up to the end of the year 1899, the proportion of fatal accidents from explosions of fire-damp in Queensland collieries is 0·3534 deaths per million tons of coal raised, the proportion up to the date of this report, or nearly six months later, is 1·3538 deaths per million tons. The yearly output of coal from the Burrum and Ipswich Coal Fields is given in a tabular form in Appendix II., and the annual output for the whole of the Colony in diagram form in Appendix III.

In New South Wales during the twenty-two years ending 1899, which is as far back as statistics are obtainable, 69,222,340 tons have been raised, for a loss of 99 lives from explosions of gas, and the proportion of deaths is 1·4301 per million tons of coal raised. Could the statistics have been obtained back to the beginning of the year 1860, it is most probable that this proportion would be considerably reduced.

In Great Britain during the last quarter of a century 4,749 lives have been lost from this cause for an output of 4,093,174,187 tons, giving a death-rate of 1·1602 per million tons of coal raised.

The figures above cited indicate that the proportion of deaths in Queensland from explosions of gas is a little lower than it is in New South Wales, and a little higher than in Great Britain; but still, as before stated, with the small output of coal in this Colony, it is quite impossible to institute a comparison of any great value.

The Commission in the course of their investigations found that, in many of the mines, the provisions of the Mining Act dealing with the regulation of mines, are to a very great extent disregarded on the part of the management. More especially, perhaps, is this the case with regard to the sections of the Act relating to the following subjects:—

The inspection of mines before the men are allowed to proceed to their work;
The entry of the report of such inspection in a book;
The keeping of an accurate plan at the office at the mine, showing the workings up to within three months past;
The ventilation of mines in such a way as to supply not less than 100 cubic feet of pure air per minute for each man, boy, and horse employed in the colliery.

The Commission are of opinion that, in the majority of cases, the persons employed to manage collieries are very much below the standard in intelligence, and knowledge of mining, that should be required of men filling such responsible and important positions; and that the employment of a higher class of men as managers would not only do much to lessen the danger from accidents, but would also be advantageous to the owners, inasmuch as it would lead to the better working of their mines.

With reference to Section 227 of the Act, providing that the persons employed in a colliery may, at their own cost, appoint two competent miners to inspect the mine, and that the persons so employed shall be allowed, once at least in every month, to go to every part thereof, &c., the Commission regret to say that the evidence shows that only in one single instance, and that ten years ago, have the miners availed themselves of this privilege. The provision is an admirable one, and, if made use of by the miners, would tend greatly to improve the management of the mines. Several witnesses were examined as to the reason why the men have not availed themselves of this provision, and it was variously attributed by them: to an unwillingness on the part of the miners to incur the small necessary expense; to

an impression that such action might, to a certain extent, reduce the responsibility of the management; and to a feeling that it would not be favourably regarded by the management. With reference to this last objection it is but fair to state that all the managers questioned on the subject replied that they would be only too glad to see the men take advantage of the section. One miner said that if chosen he would not act, because the men would think he ought to find fault when he did not see anything to find fault with; but the Commission cannot believe that this can be the true feeling of any large number of the men.

Section 198, which permits the men to appoint two competent miners to examine the mine or any part of the workings thereof, if they are considered unsafe by the miners, is also a dead letter, no effort on the part of the men having ever been made to put it into operation.

RECOMMENDATIONS.

The Commission, in making recommendations with the view of lessening the liability to explosion of inflammable gas in collieries, are desirous of pointing out that they recognise the fact that as "*The Mining Act of* 1898" only came into operation during the month of March, 1899, there has not yet been sufficient time to fully test the efficacy of many of its provisions.

The Commission recommend:—

Management.

1. That, after a date to be suggested by the Board of Examiners recently appointed under Section 199 of the Act, no person shall be eligible to act as Manager of a Coal Mine in which more than ten persons are employed underground, unless he possess a First-Class Certificate of Competency, or a Certificate of Service.

2. That, after a date to be suggested by the Board of Examiners, no person shall be eligible to act as Underground Manager in any Coal Mine in which more than ten persons are employed underground, unless he hold at least a Second Class Certificate of Competency, or a Certificate of Service.

Inspection before Commencing Work.

3. That inspections of coal mines shall be made with a locked safety-lamp, except in the case of a coal mine, or district in a coal mine, in which inflammable gas has not been found within the preceding twelve months; and that the person making such inspections shall, in some conspicuous part of every working place examined by him, mark the date of such inspection, and his initials.

4. That any place in a coal mine in which inflammable gas is likely to be met with in any quantity, such as near faults, extensive goaves or wastes, or old workings, a safety-lamp shall be used in such inspection.

5. That where safety-lamps are used, all examinations and tests of, and repairs to such lamps shall be done by the owners.

Ventilation.

6. That no air-way shall be less than 18 square feet in section, and 3 feet in height.

7. That no roadway, tunnel (or air-way which is ordinarily used as a travelling way by the workmen), shall be less than 20 square feet in section, and 4 feet in height.

8. That where mines are ventilated by a furnace, fan, or other appliance, such shall be kept fully and continuously in operation, except in the case of any holiday or stoppage of work, when such appliance shall be started at least twenty-four hours before the commencement of work again in the mine.

9. That the system of placing steam-pipes in the main shaft, or in a tunnel, where the men ascend or descend be discontinued; and that in all coal mines where such a system now exists the pipes shall be walled or boarded off, or other means be provided for the ingress and egress of the workmen employed.

10. That in the driving of levels or rooms, bratticing, or some other means, be employed to carry the air within five yards of the face of such levels or rooms.

11. That in the second paragraph of Rule 1, section 242 of the Act, the words "districts or splits" be defined as meaning, "Such part of a seam as has an independent intake commencing from a main intake air-course, and an independent return air-way terminating at a main return air-course."

Use of Safety-lamps in Working.

12. That no lamp or light other than a locked safety-lamp shall be allowed or used—

(*a*) In any place in a mine in which there is likely to be any such quantity of inflammable gas as to render the use of naked lights dangerous; or

(*b*) In any working approaching near a place in which there is likely to be an accumulation of inflammable gas; or

(*c*) In any ventilating district in which any ignition of inflammable gas, however small, has occurred during the preceding three months; or

(*d*) In any district in which, owing to the proximity of a fault, the presence of open goaf, the occurrence of incipient creep, or any other cause, there is reason to suspect the occurrence of gas in that ventilating district.

13. That when it is necessary to work coal in any part of a ventilating district with safety-lamps it shall not be allowable to work with naked lights in another part of the same ventilating district situated between the place where such lamps are being used and the return air-way.

14. That wherever safety-lamps are used they shall be so constructed that they may be safely carried against the ventilating current ordinarily prevailing in that part of the mine, even though such current should be inflammable.

15. That a safety-lamp shall not be unlocked, except at, or on the out-bye side of, the lamp-station; and under no circumstances shall powder or other flame-producing explosives be employed in working coal where safety-lamps are being used.

16. That no person who has not been duly appointed for the purpose of examining, lighting, or cleaning safety-lamps shall have in his possession any key, or other instrument, or contrivance for opening the lock of any safety-lamp.

17. That no person employed in a mine or part of a mine where safety-lamps are required to be used shall have in his possession any lucifer match, or apparatus of any kind for striking a light, or any pipe, tobacco, cigar, or other inducement to tamper with his lamp, or to obtain a light.

18. That where safety-lamps are required to be used the position of the lamp station for lighting or relighting the lamps shall not be in the return air-way.

Separate Act for Coal Mines.

19. That, in view of the very great difference that exists between the working of coal and metalliferous mines, coal mines be worked under an entirely distinct Act.

WILLIAM H. RANDS, Chairman.
WILLIAM FRYAR.
THOMAS GLASSEY.
WILLIAM RANKIN.
LEWIS THOMAS.

RIDER BY Mr. GLASSEY.

With reference to Recommendation No. 3, I am of opinion that all coal mines, irrespective of whether inflammable gas has been found in them or not, should be examined with a locked safety-lamp every morning before the men are allowed to enter their working places.

THOMAS GLASSEY.

RIDER BY Mr. FRYAR.

With reference to the origin of the gas that caused the explosion at the Torbanlea Colliery on the 21st March, I consider the evidence conclusive that the gas emanated from the floor at the working place of the Houstons.

WILLIAM FRYAR.

1900.

QUEENSLAND.

ACCIDENTS IN COAL-MINES.

MINUTES OF EVIDENCE

TAKEN BEFORE

THE ROYAL COMMISSION

APPOINTED TO

INQUIRE INTO AND REPORT UPON THE NATURE AND CAUSE OF A RECENT ACCIDENT AT THE TORBANLEA COLLIERY, AND ALSO CONCERNING THE OCCURRENCE OF INFLAMMABLE GAS IN THE MINES SITUATED ON THE BURRUM AND IPSWICH COAL FIELDS.

(Torbanlea.)

WEDNESDAY, 25 *APRIL*, 1900.

PRESENT:

MR. W. H. RANDS | MR. T. GLASSEY, M.L.A.
MR. W. FRYAR | MR. W. RANKIN
MR. L. THOMAS.

MR. WILLIAM HENRY RANDS, CHAIRMAN.

JAMES ROBERTSON, Mine-owner, examined:

J. Robertson. 25 Apr., 1900.

1. *By the Chairman:* You are the owner of the Torbanlea Colliery? Yes; of Torbanlea.
2. How long have you been connected with the colliery? Well, I took up the land twenty-five years ago, but began to sink for coal in 1882.
3. And before that time, had you had any experience in coal-mining? Yes. I had, at home in Scotland, and my father and grandfather before me.
4. Where there was any large quantity of gas? No; not in very fiery mines.
5. Were you in mines where safety lamps were in general use? No; not in general use.
6. Were they used in parts of the colliery only? Only on occasions.
7. What system of working is usual in Scotland? Stoop and room and long wall.
8. Was it usual to find the most gas in working the solid coal or working the pillars? In the solid wall.
9. And as a rule naked lights were used even when gas was known to exist? Yes.
10. And the gas was swept away by the good system of ventilation? Yes; by the ventilation, of course.
11. How long is it since gas was first known to occur in the Torbanlea Colliery? I could not fix it exactly, but perhaps three or four years; in fact there was so little that it was never thought of.
12. Who was manager at the time when gas was first discovered? I think Mr. Sharp.
13. That is the present manager? Yes.
14. You, of course, have been thoroughly conversant with the general management of the mine? Yes.
15. You would always see the reports of the manager and overman? Yes. I have always seen them, and consulted over the reports.
16. Has Mr. Sharp, the manager, ever suggested to you the advisability of using safety lamps? No, never—only as a check to examine the workings. We had safety lamps for that purpose.
17. The workings are always examined with a safety lamp? I understand so.
18. And any precautions of that sort, taken for the safety of the miners, would be left entirely to the manager? Yes, it would be left entirely to his opinion.
19. And whatever he thought necessary would be carried out? It should be carried out.

J. Robertson. 20. No obstacles were put in his way? No obstacles at all. He was rather encouraged the other way—to be careful and cautious.

25 Apr., 1900. 21. Have you been in the habit of visiting the workings yourself? Underground?

22. Underground? Not for a considerable time. In the early times I was pretty often down, but not when the company was in existence.

23. When you went down, did you examine the working places yourself for gas? No, I never did because I never considered there was gas.

24. Have you ever received any complaints from the manager as to the presence of gas? No, I have not.

25. Nor from any of the men? Nor from any of the men.

26. Not at any time? Not at any time.

27. And you had every confidence in Mr. Sharp, the manager? Every confidence in him.

28. Do you consider that the mine has been properly managed as regards the safety of the men? Certainly; I am satisfied of that.

29. *By Mr. Glassey:* You say you commenced sinking in 1882? Yes.

30. When did you first commence coal working? We sent away the first coal in March, 1883.

31. I understand that you sold out your interest in the company some time ago? Yes, I sold out three or four years ago.

32. And when did you resume possession again as the sole proprietor? On the 1st January.

33. The 1st of January of this year? Yes; from the liquidator.

34. So that the reports which you might hear with regard to gas having been seen in the mine three years ago were outside reports? They were official reports in this way, that I was managing director for the company, being the largest shareholder.

35. And there is no person but yourself interested now in the mine? No person but myself.

36. You say you have had experience in coal-mining in Scotland? I was a mining surveyor, and used to survey upwards of 40 mines a year for some years. I surveyed and reported on mines for the Clyde Iron Company.

37. Were those surveys below ground? Below ground.

38. You did not do any surveying on the surface? Oh, yes; I have done that, but I was engaged as a mining engineer with my brother.

39. How long were you in practice as a mining engineer with your brother in Scotland? For about four years.

40. Where was that? In Glasgow. My brother has been in practice at St. Vincent for upwards of fifty years.

41. Where are the pits located with which you have been connected? The Clyde Iron Company's pits, some at Quarter, Possel, Cumnock, and Hurlford.

42. Do you know the mines round Fernigare? Yes; round about Hamilton, Fernigare, and Greenfield.

43. In your official capacity as a surveyor, what opportunities had you of observing the internal workings of a mine so far as a knowledge of gas, and that sort of thing, is concerned? I held a lease of a colliery myself; I was a colliery proprietor for five years, and had complete control and the directing of that mine. But in reporting on mines, a surveyor has very important work to do in directing the managers of various mines.

44. That is to say, directing managers with regard to the internal working of the mine? With regard to the internal working and ventilation, and the more economical working of the mine.

45. About what period was that? That was from 1853——

46. Up to when? Till I left home in 1865.

47. And you have never been back since? Yes; I have been back, but not in connection with collieries.

48. Then you have really had no connection with collieries in the old country since the passing of the great Mining Act in 1872? No.

49. And you have no knowledge of modern coal-mine appliances, except by reading? No; except by reading.

50. You say it is only during the last three or four years that you have had any reports with regard to gas having been seen in the Torbanlea Colliery? I think so.

51. Do you remember a man called Madders working for you? Yes; he was working for me for some time.

52. Do you remember that man being burnt? The first I knew of that was a statement I saw in the papers a few days ago.

53. Was there no burning case in that mine prior to the burning of Ritchie on the 9th February, 1896? Ritchie's case and that of the man Keene, who died, are the only two cases I remember.

54. Then you heard nothing at all about Madders being burnt? I do not remember that occurrence at all; it first came under my notice through a statement in the newspapers.

55. You really had no information about the matter? I may have been away from home at the time; the first I heard of it was what I saw in the papers.

56. You have been in the habit of going from home? Not often.

57. You say you had no information of the explosion by which the man Madders was burnt in 1890? I do not remember it.

58. And you do not remember receiving any information about subsequent burnings up to 1896? The only two cases I am aware of are Ritchie's and Keene's.

59. Ritchie was severely burnt, wasn't he? Pretty severely, I think. I do not think Keene was burnt so severely.

60. At any rate the burning resulted in his death? It was more from the shock, I understand; he was sick at the time, I believe.

61. Have you ever seen black damp in that coal mine of yours? No, I never came in contact with it.

62. Do you know anything about the modern system of ventilation by splitting of the air and carrying it into the various parts of a mine according to the number of persons employed? Oh, yes. That is not new. I think about Fernigare there is as good a system of ventilation as you could wish.

63. You never saw any black damp there? No.
64. And you never heard of any gas being in your mine until three or four years ago? Not so far as I know.
65. I think you said, in your evidence at the inquiry recently held, that when gas was seen the Davy lamp was used; has that been the custom? That is usually done when it is thought there is any danger; you get a Davy lamp and test the mine.
66. Has it been the custom in your mine, when gas was seen, to use the Davy lamp? Well, the safety lamp is there for them when they require it.
67. For whom? The manager and overman.
68. Do you expect your manager or overman to insist on the use of the Davy lamp where gas has been seen, or has that been the custom in your mine? We use the Davy lamp to test the mine and see if there is any gas there.
69. You said in the evidence which you gave before, that gas was seen before occasionally, and swept out by the ventilation. What do you mean by ventilation? The word "occasionally" should not be there; ventilation is always used to take away gas if there is any there.
70. But you are reported to have said "occasionally"? That word should not be there; it is unnecessary.
71. When gas is in a mine, should it not always be swept out by ventilation? Yes, that is absolutely necessary.
72. You also said that when taking out the pillars a safety lamp is used when gas is known to exist? Safety lamps are always in use when gas is known to exist, to test the mine and see if there is any gas there.
73. When pillars are taken out I suppose considerable falls of the roof will take place? Well sometimes.
74. When those falls do take place, can you ascertain for certain that there is no accumulation of gas in the cavities created by those falls? The overman is there with his safety lamp to see to that.
75. Assuming that there was a cavity, or a number of cavities, adjoining the place where pillars had to be taken out, would you not expect to find gas in those cavities by falls suddenly taking place? There might be.
76. It is hardly likely that the roof will stand when the pillars are taken out? They are not all taken out in this mine—some pillars are left.
77. When those pillars are taken out, and falls take place, can you be certain that the cavities to which I have alluded are not charged full of gas? We can be certain of nothing.
78. I am asking you for your experience as a practical miner? The overman is there with his safety lamp to test and see if there is any gas.
79. Do you mean that the overman is sitting alongside those cavities when gas is likely to make inroads on those who are working in the mine? No; a current of fresh air passes round the workings, and he examines that daily—that is the rule.
80. But can the air pass into those old workings and into those cavities to which I have alluded? It will only go round, and its purpose is to carry away any gas that may be there.
81. Suppose those cavities are charged with gas, and not far away other pillars are taken out where the men are working and another fall takes place, would there not be a likelihood of gas being forced out to where the men are working? If gas were coming out of the crevices, there would.
82. But the gas would be forced out by those falls? Yes.
83. And don't you think there is likely to be gas there? It depends altogether upon where the pillar is, and whether the fall is adjacent to where "trouble" or fault has occurred.
84. You think gas is not likely to be found where falls have occurred except near faults? Where you have faults you look for it.
85. On what do you found that opinion? Simply that you find that gas is given off where there are troubles to a larger extent than in other places.
86. That is in old workings? I have not been in the old workings and cannot tell you.
87. So that it is just possible that in these cavities considerable quantities of gas may accumulate without any means of ventilating them properly? The means of ventilation are in the current of air where the men are working, and the ventilation carries the gas away.
88. How can the ventilation get in where falls of roof have taken place? That is outside of the means of ventilation then. The gas will be carried away where proper ventilation exists.
89. We want to know how this gas got to the place where the men were working. The probability is that the gas came from these cavities to which I have already alluded, where falls have taken place after the pillars have been removed? I do not know. The gas might come from the pavement.
90. I think the theory of its having come from the pavement is very far-fetched indeed. At any rate, will you, from your practical experience, agree that the gas is likely to accumulate in these cavities which have been created by falls? It will accumulate to the rise.
91. And I presume the cavities will be at the rise? Yes, and if the air is going there the gas will be carried away.
92. But in a deep cavity where there has been a large fall, how is the air to reach there? Well, if the gas is there to any extent it will exude, and the air will carry it away.
93. If it reaches it; but how is the air to get there? It passes along there and carries away whatever is beyond the cavity.
94. Suppose there was 10 to 30 feet of fall, and gas had accumulated, how is the air to reach that. I am speaking of places where the pillars have been removed and where large falls have occurred. How is the air to reach the cavities? The air cannot reach them, of course.
95. Therefore it is not improbable that these cavities will be charged with gas? It is quite possible.
96. Those cavities being charged with gas, supposing other falls took place, would not the pressure force the gas from the cavities and would it not be likely to be carried to where the men were working? That depends upon the position of the fall. If it is beyond the men where the fall takes place the air current will go round.
97. But where it is not possible to send the ventilation, how is it possible to ventilate such places? Well, there is nobody in there at all.

J. Robertson. 98. But why is this gas likely to reach the workings and what are the elements at work to force it where the men are working? If there is an additional fall the concussion will drive the gas out.

25 Apr., 1900. 99. That being so, when gas has already been seen at these places, would it not have been better to have used extra precautions and insisted on the men working with safety lamps when they were removing the pillars? That is a matter for the judgment of the man in charge. There is a man with the safety lamp who tests the places occasionally.

100. Who is the man to whom you allude? The overman.

101. Can he of his own accord enforce these precautions if he thinks fit? If he thinks there is danger, of course he must report to the manager.

102. But do you not see that the danger is present inasmuch as the gas must of necessity lodge in these cavities and be forced out in consequence of the concussion caused by other falls? Yes, it would be forced out and go along with the air current.

103. Of course. I am not speaking of where a current of air exists, but of places where the current does not reach. The gas would then be forced out to where the men were working with naked lights? The men working with naked lights were within the radius of the air current, and not outside of it.

104. You say that it is only where gas has been actually been seen that safety lamps are used. I want to get at the fact whether it would not have been prudent to have insisted upon safety lamps being used alongside of these old workings where gas has doubtless accumulated? Well, so little gas has been seen that it was not considered advisable. I suppose that was the reason why safety lamps were not used.

105. Not considered advisable until after the accident took place? The dangerous places were visited every day with a safety lamp.

106. Is it not much better to use precautions before accident takes place than after? We are always supposed to take precautions, and the mere fact of the safety lamp being used shows that caution was used.

107. You say that in Scotland it was the custom to take out the pillars without the use of safety lamps? Yes, as a rule. I have never seen lamps used in that case.

108. Then what precaution is used for the protection of the lives and limbs of the men who are engaged in taking out the pillars when the workings may be charged with gas? The precaution we take now—using the safety lamp to test for gas.

109. Were the safety lamps used? Where?

110. Here at Torbanlea? They were in use certainly.

111. Were the safety lamps used by the men taking out the pillars alongside of these cavities? I am not aware that there were any cavities.

112. Then you mean to say that that large area would keep up by itself, and that there would be no falls? No, I say there might have been falls at other places beyond where the men were working.

113. Even alongside where these men had been working, and where the pillars had been removed, there had been falls? The manager would tell you that better than I can.

114. But what is your opinion. Would the roof keep up of itself or would it be likely to come down? It will keep up for a time, but it will break away the more you take down the stooping. After the stoops are taken away the roof will come down.

115. The pillars have been taken away? They have been partially removed.

116. To what extent have they been left? I cannot say. The manager will explain that to you.

117. You say that outbursts of gas are more likely to occur when working the whole coal than when taking out pillars? Yes.

118. On what do you found that opinion? Because you are opening up strata.

119. Would you call it an outburst of gas if one of the large cavities were charged, and the concussion caused by another fall forced the gas out? It would be an outburst if it was caused by a concussion.

120. Then you think it probable that where gas has accumulated a concussion would force it out to where the men were working? The gas would be forced out, no doubt.

121. Do you think that has been the case in this instance? I am not sure.

122. Is there a probability that it might have been so? There is a possibility.

123. How often do you receive reports from your manager? We get our reports almost daily since I had the mine, and when the company had it the reports were sent up almost as regularly.

124. Who received those reports? The secretary.

125. Who is the secretary? Mr. Smith.

126. Is he in Maryborough? He is in Maryborough.

127. I suppose he will be available to give evidence before the Commission? Certainly.

128. Have you the plans of the workings? The manager has them at the works.

129. You say that you are quite satisfied that the principles carried out in Scotland have been carried out here? As far as my experience goes.

130. That is to say, the same principles that were adopted when you left home forty years ago? About thirty-five years ago.

131. Then you think it would be quite sufficient to follow the principles of working a mine which were in operation in Scotland forty years ago? No; I do not say that.

132. You say in your evidence that you are quite satisfied that the principles followed out in Scotland have been carried out here? Yes.

133. And you are speaking from your own experience? From my own experience.

134. Do you think those principles are the best? I do not know any better.

135. Do you think they are good enough? I think they should be sufficient.

136. *By Mr. Fryar:* How long is it since you were down the Torbanlea Colliery? It is a considerable time; I could not exactly say when I was down.

137. Is it weeks, or months, or years? Probably more than a year, possibly a couple of years.

138. Have you been down the dip at all since the dip was driven? I think I was—once.

139. After they began to take out the pillars? Oh, no; they were driving the dip.

140. Then, anything you know of it is from reports made by the manager? Yes, from the manager's reports.

141. Do you know what area is excavated? No; I have not measured it.

142. Has it been reported to you? No; the exact area has never been reported to me; but Mr. Sharp could give it to you, I dare say.
143. *By Mr. Rankin:* You say the safety lamp was always in use; was it the custom to examine the whole of the colliery in the morning with the safety lamp, or only the district where gas had been seen? Only the district where gas had been seen.
144. You suggest that there is a possibility that the gas, in this instance, may have come from the bottom—from the pavement? Yes.
145. There is coal a little bit below that floor? Yes, about 4 or 5 feet below it.
146. What thickness is that seam? I think 1 foot or 15 inches thick.
147. Do you think it is at all likely that gas would come from that? It is quite possible.
148. Have you ever known gas to come from it? No, I do not think they have seen gas, except inside the "trouble" we have there.
149. How long is it since that "trouble" was cut? About four years.
150. Has it never occurred to you since that there has been an increase in the accumulation of gas? It has not been so reported to me.
151. You were not aware that there had been any increase before the explosion? I was not aware that there had been any increase.
152. You say they work with safety lamps now. How many safety lamps have you got? I did not say they worked with safety lamps; I said the overman examined with a safety lamp a district where gas had been seen.
153. The overman? Yes, the overman.
154. How many safety lamps have you? I think we have four, but Mr. Sharp will tell you that.
155. Was it ever suggested to you to get safety lamps to work that place? It was never suggested.
156. Have you ever ordered a quantity from some other party? No.
157. Did Mr. Sharp order any? I do not think he ordered more than he got, or he would have got them.
158. You never had any cause to believe, before the accident, that there was going to be any serious danger in the mine? No, otherwise there would have been more precautions taken—there would have been more precautions taken if we had thought there was any necessity for it.
159. You never heard from any source, before the accident, that there was rather more gas than usual in that part of the mine? No.
160. Supposing a man was working there when there was gas he would be sure to ignite the gas, and it would be difficult to know exactly where the gas was? Yes.
161. It might be there, and the men not know that it was there? It might be.
162. *By Mr. Glassey:* You say you have four safety lamps at your mine? I believe there are four.
163. And there were five persons who lost their lives working there with naked lights? Yes.
164. And the overman was working with a safety lamp, and there was a boy with him, which made seven persons? Yes.
165. How could four safety lamps serve seven persons? It was not considered that they required safety lamps.
166. My experience is that where gas has been seen at all in a mine, and pillars are to be removed from there, the men in every instance work with safety lamps—at any rate, it seems to be the safest method? Well, seeing that this accident has happened, and that these men have lost their lives, I should say that it would have been safer. I believe that three of those men would not have been burnt if they had lain down as others did.
167. That is not the question. You said, in answer to Mr. Rankin, that you only examined the mine with a safety lamp after gas had been discovered there? I am not aware that they use the safety lamp in any mines where there is no gas.
168. Where is the mine where there is no gas? I think we worked for years here without ever seeing any gas.
169. Evidence was given before a Royal Commission in England, a copy of whose report I have here, that in one case a mine had been working for 100 years without any gas being discovered in it, but that finally gas was discovered in the mine with, to some extent, serious results. Suppose a number of men went with perfect confidence into a mine where gas had not been discovered, and went without safety lamps, and gas really existed there, what would happen? An accident, I suppose.
170. Don't you think it is a wise thing to use the safety lamp? Well, it has been the custom to use it.
171. Only in some things—don't you think it is a wise thing to use a safety lamp? I think that to test a mine with a safety lamp is a very important thing.
172. Accidents are less likely to occur in examining a mine with a safety lamp than in examining it with a naked light? Yes.
173. Then the custom of not examining a mine with a safety lamp is a bad custom? It is open to improvement.
174. You never heard of gas being in your mine prior to the cutting through of that "trouble"? I think the first I heard of it was in the case of Ritchie.
175. Was he burnt after they cut through the "trouble"? I cannot say exactly whether it was inside or outside the "trouble"; but Mr. Sharp will be able to tell you.
176. Mr. Ritchie was severely burnt on the 9th of February, 1896, was he not? Yes.
177. And one David Keene was burnt on the 26th of February that same year? Yes.
178. From the effects of which he died. Was the mine always examined with a safety lamp after those occurrences? I believe it was.
179. Have you any fund at your mine to meet the case of widows and orphans when occurrences of this kind take place? No. I started one when I had the mine myself, and it accumulated to some extent, but when the company took over the mine the men broke it up, and divided the fund among them.
180. Both the men and the employer contributed to the fund? Yes.
181. Did the dependents of the men who lost their lives through accidents in the mine get any compensation from the company? I do not remember.
182. You do not know of your own knowledge? I do not know of my own knowledge.
183. You don't remember paying any money over to the dependents of those men? It would be the secretary of the company who would pay the money, if any was paid.

J. Robertson. 25 Apr., 1900.

184. Would you be in favour of employers contributing so much per ton to meet cases of this kind when they occur? Well, there is an accident insurance affair, and I suggested that the men should join with the proprietors and insure against all accidents, but they would not do it.
185. Would you favour the establishment of such a fund as I have just alluded to in order to meet such cases as have occurred, and which may occur again? With contributions from the men, do you mean?
186. No, from the employers—contributions at so much per ton? Well, the profits from coal-mining are not very good, unfortunately. The Isis Company carried on for twelve years, incurring an outlay of over £300,000, without getting any dividend, I expect.
187. Perhaps the Isis Company sold out at a big figure, and was so over-capitalised that it would not pay for the working of the coal? No, that was not so.
188. Do you think a payment of ½d. per ton would form a very useful fund, and would not be oppressive on the proprietors?—Would you favour establishing such a fund? If others did it, I would be a party to it.
189 But would you personally favour such a fund? I do not know, I am sure. I should be inclined to give a small donation to it.
190. I am not speaking of donations, but of a fund established by law by which the proprietors would be compelled to pay ½d. per ton to provide for such unfortunate accidents as this? I think I would be inclined to favour such a provision.

JOHN SHARP, Mining Manager, examined:

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191. *By the Chairman:* You are manager of the Torbanlea Colliery? Yes.
192. How long have you been manager there? About nine years.
193. Were you working in this district before that? Yes.
194. For how long? Five years before that.
195. That would be since 1886? Yes.
196. Had you had any experience of coal-mining previously? Yes.
197. Where did you gain your experience? In Scotland.
198. In what part? In Stirling, Fifeshire, Lanarkshire.
199. For how long were you working in coal mines in Scotland? Fifteen years.
200. Have you worked in fiery mines in Scotland? Yes.
201. And in mines where it was absolutely necessary to use safety lamps in parts of the mines? Yes.
202. Have you worked in mines where naked lamps were used? Yes.
203. In any of those mines where naked lights were used, was gas ever seen? Yes.
204. Gas was known to exist? Yes.
205. And yet naked lights were used? Oh, yes.
206. Were they used when taking away the pillars? Yes, naked lights.
207. Trusting to good ventilation to sweep the gas away? Certainly.
208. Have you had any experience of sudden outbursts of gas? Yes, on several occasions.
209. Would it be considered safe to work with naked lights in mines subject to sudden outbursts of gas? We have always considered it so, provided there was a sufficient quantity of ventilation. It very much depends upon the quantity of air that is travelling.
210. Is there any more danger from these sudden outbursts than from a regular emission of gas? Oh, yes.
211. The regular emission of gas can be met, as a rule, by ventilation? Yes.
212. When you first took the managership of Torbanlea, to your knowledge, had gas been found to exist in the mine? Oh, yes; we have had small quantities of gas there before that time.
213. Gas had been known to exist in small quantities? Only in the main level, and in very small quantities.
214. That is the level we went into yesterday? Yes.
215. Had there been any accident from gas in the mine before you took over the management of Torbanlea? Yes; there was a slight accident through burning when John Thomas was manager, about ten or eleven years ago.
216. Were you in the mine at the time? Yes.
217. Do you remember who was concerned in that accident and who was in charge? Yes, it happened to a man named John Madders, who got slightly burnt. There was a small quantity of gas which ignited but I do not remember the man being away from work through it. He went home the day he was burnt, but I believe he was there at work the next day.
218. It was not a serious accident? It was hardly worth calling a burning, as far as I could see.
219. When was gas first met with in any quantity in the mine? After we had gone through the stone drive.
220. Have you a plan of the mine with you? I have a sketch of the dip workings. I have not a plan of the workings with me, but can soon get it for you.
221. That accident to John Madders was the only accident until you got through the stone drive? We had another accident on the same level as that—that was the case of Robert Ritchie.
222. Who was in charge of the mine at that time? I was in charge myself.
223. Ritchie's accident took place in 1896? Yes.
224. That was inside the stone drive? No, outside; within 100 yards of the shaft.
225. *By Mr. Rankin:* Was that as late as 1896? Yes, February, 1896.
226. *By Mr. Glassey:* And Keene's accident occurred a few days after? Yes.
227. *By the Chairman:* And that was in the level about 100 yards from the shaft? About 100 or 120 yards from the shaft where I had put down a dip to test the ground. I was putting in an overcast over the horse-road, and was putting a blind shaft in a little seam above the working, and it was up in this little hole where the accumulation of gas collected. Ritchie went in on a Sunday night, and no gas having ever been seen there at any time, none of us expected to find gas there. Ritchie was burnt severely.

228. Was it the custom after February, 1896, to examine the mine for gas with a safety lamp before the men entered? Yes, in the morning.*
229. *By Mr. Glassey:* Not before that? I would not be positive as to what was done before that, because no gas had ever been seen there, but I know that from 1896 it has been done every morning in all the working places where gas has been seen.
230. *By the Chairman:* Was it done after the accident to John Madders, ten years ago? I do not think they examined the mine then more than just the level with the Davy lamp.
231. But since 1896 it has been the custom to examine the whole of the mine with the safety lamp? Yes, every morning, before any man was allowed in the place.*
232. The accident to Keene, which happened in the same month, took place inside the stone drift? Yes, about a couple of chains from the stone drive in the main level.
233. Will you explain to the Commission how that accident occurred, and tell us the circumstances relating to it? On that date the pit was not working generally; a few men only were working in those levels. There was a pair of levels running from that stone drift right and left, and I had men working in those levels. The trapdoor between the two levels, which conducted the air into the bottom level and out of the main level, had been left open by some of the men who had come out of those places. Keene, the overman, was the first to find the door open, and apparently he imagined that it had been only just left open. There was a Clanny lamp hanging there for the use of the men when working in that place, a lamp which I gave them to keep always hanging on the top side, so that if there was any gas collected there a warning might be given them. The lamp was always there for that purpose. Keene told me that he did not think it necessary to light the little lamp which I had given him, and as far as I can make out, when the accident occurred he lost his presence of mind, and did not attempt to lie down. Another man, named Redmond, working in the bottom level, lay down, and was not burnt, except a touch on one arm.
234. That accident occurred at the cut through between the two levels? Yes.
235. Have you any idea how long the door was left open? I should think about an hour, from the quantity of gas that had collected.
236. You have no actual knowledge of the time? No; no actual knowledge.
237. Leaving open the door would shut off the ventilation through those two levels? Yes.
238. Keene being an overman I suppose was considered a competent man? Oh, yes, he was a competent man; there was no doubt about that—he was a really good man.
239. Would you look upon it more or less as carelessness on his part in not taking the precaution of taking a Davy lamp with him? I should not call it carelessness; it was more thoughtlessness, as he imagined that the man Redmond had just taken in an empty wagon. According to Redmond's statement, it appears that he did not bring his wagon through the door, but Keene imagined that it had just been brought through a minute or two before.
240. *By Mr. Glassey:* Was it a self-acting door? Yes.
241. You had no trapper there? No, no trapper.
242. *By the Chairman:* Then Keene had no way of knowing how long that door might have been left open—he thought it had been left open only for a moment? Yes, that is it.
243. Was that a violent accident? I could not say that it was; I examined the place very closely afterwards, and could see no sign of any violence whatever. The quantity of gas was sufficient to burn him severely, but there was no sign of any violence.
244. Has there been any accident in the mine from gas from the time of that one, in 1896, up to the one on the 21st of March last? No.
245. Since you have been working in the dip have you met with much gas? Not a great quantity. I could always find a little gas, but not a great quantity.
246. Not in any quantity that you considered dangerous? No, not in any quantity that I would consider dangerous.
247. Have you ever had any idea that it would be advisable, as a precaution, to use safety lamps? No, otherwise I should have had them used.
248. And if you did not think that it was absolutely necessary to use safety lamps, would there not be a danger of accidents of other kinds than an explosion of gas from their use? Yes, there would be a danger of other accidents occurring in using a poor light like that of a safety lamp. Still, I did not take that into consideration. If I had thought it necessary to use safety lamps I should certainly have used them.
249. There have been many falls, I suppose, in working in that dip? Not many—not more than four or five altogether along the bottom section. The roof of the dip is still standing, as you yourselves saw when you visited the mine. The roof there is so extraordinarily strong that it has not come down yet.
250. A very small portion of the roof has come down, you say—have there been only those four or five falls? Along the soft ground next the fault there have been a few falls, but above that, where the pillars have been left in to strengthen it and keep the ground open, no falls have occurred until we come to the level, 100 yards from the main level. As a good piece of coal is worked out there, about 35 yards from the dip, a fall has occurred there.
251. How far would that be from where the men were working? Between 30 and 40 yards.
252. Can you show us a sketch of the workings? Yes. [*Sketch produced, and the scene of the accident and the place where the fall occurred indicated.*]
253. Do you think it is possible that the gas that caused that explosion could have come from that fall to the rise in the level? I do not think so. No gas has ever been seen there. I have been at the top of the fall, and never could find gas; I have been there with a safety lamp.
254. When was it last examined? Three or four days before the explosion—on the Monday morning.
255. And there was no gas there then? There was no gas there, and had any gas been lodging there I certainly would not have considered it safe to work the men underneath it.
256. *By Mr. Rankin:* Was that fall up to the little coal? No; it does not go very high—not more than 6 feet.

Note by Witness on revision.—It would be more correct to say: "All places where gas had been seen were examined with a safety lamp every morning before the men were allowed to go into them."

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257. Is it not possible it might have gone to the little coal during those three days? It is possible. It is a roof that will not come away in large quantities. It keeps crumbling away. It is a shaly formation.

258. It might get up to the little coal? No; three days would be hardly long enough. It is 26 feet away. The thickness of the fall was 6 feet.

259. That is the same little coal that you got the gas off before—where the first man was burnt? No; Madders was burnt at a different place.

260. *By the Chairman:* Do you consider that in the three days between Monday and Wednesday there was sufficient time for any quantity of gas to have accumulated? No; I do not think so.

261. Do you consider there is more danger in working out the pillars than in working the whole coal? Danger so far as gas is concerned?

262. Yes? I consider you are more likely to find outbursts of gas working in the whole coal.

263. But I mean from falls of roofs? And gas coming out of the roof?

264. Yes? I have never seen outbursts of gas from pillars of coal. I cannot say there is really more danger in working the pillars out than in working the other coal.

265. In solid coal would not the gas come off more evenly? Yes; it would be emitted more regularly, but if anything lay in the roof above the coal and a large fall came away there would be danger of liberating a large quantity of gas at once.

266. Then there is greater danger in working the pillars for that reason? Provided you have any quantity of gas above. The taking out of the pillars, of course, liberates the gas. Otherwise I should say there is less danger from gas in working the pillars than in working the solid coal.

267. You would not consider it necessary to use the safety lamps in working the pillars simply because gas was known to occur? Not if I had a sufficient quantity of fresh air passing in.

268. You said the mine is examined every day with the aid of a safety lamp. Was that done on the 21st March—the day of the accident? Yes.

269. And a report entered in the book? Yes.

270. Did you see that report? Yes.

271. What was its effect? It was to the effect that the place had been examined before any men had entered and no gas had been seen.

272. Did the overman examine the place where the Houstons were working a second time that day? Yes, it was the general custom to do so after dinner. He went there and had a look around again. It was generally done every day.

273. *By Mr. Rankin:* That is, that particular place was examined? All round the dip.

274. *By the Chairman:* Do you consider the dip workings to be particularly dangerous? From gas?

275. Yes, from gas? No, I do not.

276. I have seen it stated outside in the papers that you gave orders for the men to be removed from the mine on account of foul air on the Monday before the accident—Is that correct? No, that is not correct. There is no truth whatever in that. I gave orders for the men to be removed on the Monday morning simply because the road was beginning to crush, and showing evidences of requiring extra repairing. As to the air being deficient, there is no particle of truth in that.

277. Were the men removed from the place? Yes, on Monday morning.

278. But from the place where the Houstons and the other men met their death you did not order them to be removed? Houston was one of the men I removed from the left to the right side on Monday morning.

279. With reference to the removal of the fan, when was it removed? On the Wednesday after the accident occurred.

280. Was it removed before the four miners inspected the mine? No, it was not removed; but it was not at work. I kept the fan working for a week after the explosion occurred.

281. Were these gentlemen able to visit the exact spot at which the accident took place? Yes; they visited it twice.

282. Then it would not be true that there was so much gas that they were unable to get there? I was there with them. They got there both times, and, had they wanted to, they could have gone as far as you gentlemen went.

283. Was there much, or any, gas present? That door across the heading was shut. On the lower side of the door, after we opened it, we could find enough to draw the light of the lamp. It was found at the top of the door, but could not get up to the dip. Where the men were working no gas could be seen.

284. *By Mr. Rankin:* Did they go as far as we went? No, they only examined the place where the accident occurred.

285. They could have got further? Certainly; they had the same chance that you had. The place was cleaner and not so much crushed.

286. *By the Chairman:* They could have got down if they liked? Yes; there was nothing to hinder them.

287. *By Mr. Rankin:* That gas in the dip would have to be cleared out? There was no gas in the dip. It was just sufficient to draw the light, but not to explode in the light. These four men examined that fall in the No. 1 level the second time they came.

288. *By the Chairman:* Was there any gas in the fall? No. They got up as far as they could reach, but they did not scramble out on to the fall. They went as far as they could reach with their feet on the floor. The falls that occur in that dip do not cut square across—they tail off; it might be only a foot thick, and as you go down two or three feet. No cavity is left. The roof is too strong and will now break off square.

289. *By Mr. Fryar:* There is one question I wish to ask bearing on what has appeared in the papers, touching the removal of the men on Monday. The statement is that while the men were being removed the explosion occurred. Had those men been ordered to be removed, or were they being removed on the Wednesday morning. You understand what I am trying to get at? Yes.

290. Had they been ordered to be removed that day? No, there was no order of that kind at all; I do not understand that.

291. You see the difficulty of reconciling the two statements;—it is said that the accident occurred while the men were being removed—it is possible the order may not have been given on the Monday morning, but that it may have been given on the Wednesday. Was it given on the Wednesday? No.
292. *By the Chairman:* Was there any such order at all given? No such order. The order I gave was, "Let us work on, and take away portions of those two pillars until Saturday"——
293. *By Mr. Glassey:* The Saturday following the accident? Yes.
294. You thought you would be able to continue your work till Saturday? There would not be sufficient coal to continue after Saturday.
295. *By the Chairman:* You would not have continued working after Saturday? No.
296. Was that part of the mine dusty at all—was there much dust? No, it is not a dusty seam; there is not much dust about.
297. Not sufficient, you think, to be at all dangerous? I do not think there is any dust on the floor; there is nothing to be seen on the floor.
298. Had you reason in any part of the mine to damp the floors to keep down the dust? No, it has never been done, simply because I did not consider there was any danger from dust. The coal being all filled away nothing is left; there is no riddling, or anything of that kind, to cause dust.
299. In working those deep workings, did you ever receive any complaints from the men with reference to the presence there of inflammable gas? No.
300. While the men were working there did they ever report having seen inflammable gas? Never to me.
301. It would be their duty to report it to you if they saw inflammable gas? Yes; or to the overman.
302. To report it either to you or the overman? Yes.
303. And it would be the overman's duty to at once report the fact to you? Yes.
304. And you never received any such report? Not to my knowledge; I cannot remember any.
305. Did the men ever avail themselves of the right to have the mine examined by two competent miners, under section 198 of "*The Mining Act of* 1898"? No; they never availed themselves of that privilege at any time.
306. They never thought it necessary? They never did so.
307. How often did you inspect the mine yourself? I was often there almost every day, but always once or twice a week.
308. And after inspecting the mine, did you enter your report in a book? Once a week I did so.
309. That would be every Monday? It might be any day in the week; I was not particular as to the day.
310. When did you last inspect the mine and report before the accident? On the Monday morning, I believe it was.
311. And then you considered the mine safe so far as any danger from inflammable gas was concerned? Yes.
312. You looked upon the men who were killed in the mine as thoroughly experienced miners? Yes; they were good men.
313. And had there been gas present in any quantity, you would have expected them to have reported it? Yes, two of them especially, Houston and Johnstone, would have reported it, because they both had a knowledge of gas.
314. When was the accident reported to you? Between 1 and 2 o'clock, while I was on my way down from the Burrum mine.
315. And you at once proceeded to the shaft, I suppose? Yes.
316. What did you see there? Gambie was on the top of the pit; he came up by himself, and was the first to come up. Just a minute before I went below John Houston, the boy, came up. At the bottom of the shaft, half-way in that level, I met Johnstone being wheeled out in a wagon. Just as I went into the dip Alexander Houston came out, and the other one, Griggs, I helped to bring out.
317. Was there very much after-damp? They had Griggs through the trapdoor in the level where the nine men were working, and I felt no after-damp there. The current of air was going as usual. We brought Griggs up the intake on the main level.
318. Did the injured men show any signs of being in foul air? I don't think so.
319. But the mere fact of there being an accident must have produced a certain amount of after-damp? I don't think you could call it after-damp altogether, as there was plenty of room underneath for after-damp to fall down, and it should fall, being heavier than the atmosphere there. What I felt there afterwards was more a gaseous vapour, the residue of explosion, which was really working its way up the dip. The smell of this gaseous vapour could easily be felt there. I really could not say that I felt the presence of after-damp, except you call the gaseous vapour—the "carbon mon-oxide"—the after-damp.
320. From what you saw, would you consider the explosion a violent one? No; I saw very little evidence of a violent explosion. In the road, just where the explosion occured, there were two or three empty wagons standing, and they were not in any way shifted; they seemed to be standing on the road just where they had been left by the boy. If the explosion had been a violent one, I should say that the door across the dip would have been blown down, but it was standing the same as usual, and all the trap-doors you saw passing down on the left of the dip were just the same as usual. The only thing I saw was just at the foot of the dip, where the canvas was ripped off. I had the door there taken off, and three-ply canvas put in its place, and that canvas was blown off. That was the only effect of the explosion that I could see.
321. Those trucks were not moved, and the props were not injured or disturbed? No; there was nothing injured except that canvas.
322. Have you formed any opinion as to where the gas which caused the explosion came from? No; it is a mystery to me; I cannot understand it; I really cannot explain it at all.
323. Do you think it possible that it could have come from the floor—from the seam below? The bottom coal generally contains most gas, I think.
324. That is the coal 2 feet below the floor? Yes. There is very little gas in the top coal; it generally came from the bottom coal. Down the dip the bottom coal is not good, so that there is a great possibility that the gas may have come from the bottom floor, owing to the bottom being burst up by the weight of the roof on the top.

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325. Did that upheaval of the floor take place at the time of the accident? I could not say, but I did not notice it before the accident.
326. When did you first notice that upheaval of the floor? In going over there to examine the place just after the accident, when I was down with those four men. That was the first time I noticed it, and I then saw the place was swelled or burst up about a foot or so.
327. Have you a plan of the mine? Yes. [*Plan produced and explained.*]
328. *By Mr. Glassey:* For six years there was really no examination of the mine with a safety lamp? I could not say that there was, but I cannot remember.
329. But you were manager? No; I was overman at that time.
330. *By Mr. Rankin:* Not to your knowledge? Well, I was not interested in the same way. I was not manager.
331. *By Mr. Glassey:* How often do you make up your plan of the mine? About every three months.
332. *By the Chairman:* Was any gas found in the workings to the right? No, not the right. In the heading we once had a quantity of gas.
333. *By Mr. Glassey:* How long ago was that? About four years ago.
334. *By the Chairman:* What is the depth of the air shaft? About 120 feet.
335. *By Mr. Glassey:* And your main intake? Three hundred and fifty feet. My reason for taking the fan off was that there was more than sufficient air to do the work; in fact, the men complained about not being able to hold the lights. Any amount of air was going without the fan.
336. Then you had no motive, as is alleged, for removing the fan? No motive whatever. I kept the pit on a week after time. I was done with the pit a week ago, but I understood that you gentlemen were coming here and would probably want to go down.
337. Of course it would have been better if the pit could have been left standing as it was at the time of the accident? Nothing was touched in the pit. You saw it exactly as it was.
338. You say you have had large experience in coal mines? A fair experience –twenty-nine years altogether.
339. Fifteen years in Scotland, and fourteen years here? Yes.
340. And one year as a miner here? No, twenty-nine years including everything—eight or nine years as manager and four years as overman.
341. What age were you when you came out here? Roughly, about twenty-six years.
342. You have had some experience in various mines? Yes; at Motherwell, North Motherwell, Sir John Watson's mines, Camp Colliery. I worked also in the Spittle Colliery—one of the most fiery in the country.
343. You would not consider Watson's mine a fiery mine? I think No. 4 was very fiery when I went there first.
344. How long ago? Twenty or twenty-five years ago.
345. I worked in both No. 2 and No. 4? Yes? When the dip was driving the gas was so strong that they had to carry up a 9-inch brick wall. Three or four plies of canvas were not sufficient. We had three or four explosions in driving that dip, and the manager decided to stop work until he had erected the brick wall.
346. Did you ever work on the Clyde side? I have worked in the Graveyard pit, but not much, and only as a boy.
347. The Watson mines were fairly well ventilated mines? Yes, very well ventilated.
348. Were the mines in Scotland better conducted, do you think, than the mine subject to your own control? Do you mean better ventilated?
349. Yes, better ventilated? Well, they were cooler, but you cannot say that because they were better ventilated they were better worked. You have to take into consideration the effect of the climate, which has a great deal to do with the heat in the mines in this country. The quantity of air I had going in the Torbanlea mine would bear favourable comparison with any of the Lanarkshire mines.
350. You do not hold a certificate? No.
351. Neither for service nor competency? No, but I could have one for competency.
352. What other mines in Lanarkshire were you in? North Motherwell, the Doctor's Pits, and the Camp Colliery.
353. Did you ever work in Blantyre? No.
354. Do you remember the Blantyre explosion? Yes. I was there the day after.
355. Then, of course, you have had a fair amount of experience in gases? Yes, I think so.
356. Have you any other mine under your charge besides the Torbanlea Colliery, where the accident occurred? The Burrum mine.
357. Does that belong to the same company? Yes.
358. Do you devote much of your time to that mine? About one-fourth of it—a portion of every day mostly.
359. Who do you leave absolutely in charge when you leave Torbanlea? William Keene.
360. Is he the present overman? Yes.
361. I am speaking now of the Torbanlea mine? Caldwell is in charge there.
362. And when you left the other mine—the Burrum—whom did you leave in charge? William Keene.
363. So that Mr. Caldwell is overman in charge in your absence? Yes.
364. Do you go to Burrum every day yourself? Mostly I have been there every day.
365. But generally? Every day I am there.
366. Down the mine? I would not say every day down the mine. I hear reports from the overman after his examination.
367. Does the overman examine this mine every morning, or has he done so since the accident of 1896, with a safety lamp? Yes.
368. Who examined the lamps? I did.
369. Before they were put into operation? Not every morning. I have a look at them generally. Caldwell has been a man of great experience in gas. I have been teaching him as far as I could.

370. What tests have you applied before you entrust a man with the examination of a mine with a safety lamp? Well, I have gone in with Caldwell for many days, day after day, giving him the lamp, and watching him at the work and directing him how to use it until he perfectly satisfied me that he had a thorough knowledge of the work.
371. You make these appointments solely in consequence of ability and steadiness? Oh, yes.
372. So that the River Bank Colliery occupies about one-fourth of your time? Yes, about one-fourth.
373. Don't you think there is a possibility of some laxity in the management, as far as ventilation is concerned, in your absence? No, I cannot say that. Whatever ventilation appliances we had would have to be very trumpery to break down while I was away for a few hours.
374. Where did you say you were when the accident occurred? On my way coming from the Burrum.
375. Did any person send you a message? Yes.
376. How long had you been absent that day? From 9 o'clock up till 12 o'clock.
377. Keene was overman, wasn't he, when he met with his accident? Yes.
378. Do you consider that Keene was a capable man? Yes; I consider him a very capable man.
379. Did you put him through certain tests before he was appointed? Yes, I saw that he was able to do the work.
380. How long was he in the position of overman? About three years—from the time that I took charge of the mine as manager up to the day of his death.
381. He had no certificate, had he? No.
382. What experience had he in connection with gases? I think he was in coal-mines in England most of his lifetime.
383. About where? I could not say what part of England, but I have heard him talking about the Dudley Colliery in England, and that is the district he came from.
384. Was he a North of England man? Yes.
385. Then, of course, he had some experience? He had a good deal of experience.
386. Was Keene a young man? I think he was 36 or 37 at the time of his death.
387. When examining the place in the morning, is the examination always made with a Davy lamp, or with what kind of a lamp? It is always done with a Davy lamp.
388. Supposing there was a thin skimming of gas on the roof, how would you discover that by the Davy lamp? Well, some persons turn the Davy lamp on its side, but I do not approve of that; I think it is a dangerous practice. If the skimming is so thin that you cannot discover it with a Davy lamp, there is not very much gas there.
389. Supposing you had six or eight yards of a room, as they call in Scotland, and your skimming was across that for a considerable distance out, don't you think that in the aggregate that would be a considerable accumulation of gas? Not at Torbanlea, if it was only a skimming at the face that you could not catch with a Davy lamp.
390. I am speaking of along the roof in flat workings? Yes, but at Torbanlea the workings are 1 in 3 and 1 in 3½.
391. You think the Davy lamp is sufficient in such circumstances to check gas in any dangerous quantity? Yes, I think so.
392. And you think the quantity that would not be detected with the Davy lamp would be harmless? Yes, in workings of that angle.
393. Supposing the overman finds a small quantity of gas in any room, wall, or heading, how do you get that out? It has been dusted out with a bit of a bag where it has been considered of any danger.
394. Do you think that is a good practice? It is better than leaving it in.
395. But are there no better means of getting the gas out? There may be. I have seen such a quantity of air going through the Torbanlea mine that you could not carry a lamp very well, while at the same time there was perhaps a very small quantity of gas in a corner into which you could not force the air.
396. The closing of the door by Keene when he met with an accident was a piece of carelessness on his part? No; I should not call it carelessness. I never found Keene careless. On the contrary, I found him an extraordinarily cautious man.
397. Well, forgetfulness? No; I think he was deceived in thinking that he had heard the men take a wagon in through the door.
398. Supposing there was a reasonable quantity of gas there at that particular time, don't you think a rather serious accident would have happened through leaving open the door? If there had been a large quantity of gas there it might have killed both men.
399. Would it not be better in all cases, not merely to have a self-acting door, but to have a boy there to open and shut the door? It certainly would be better if you could keep a boy sitting there; but if you have 100 trapdoors in a pit, would you put a boy to each door?
400. They do it in England, the first consideration being that of the safety of the men; don't you think it would be much better to have a boy there to shut the door than to leave the shutting of it to persons passing to and fro who might leave it open? I got over that difficulty by putting two doors there, so that if one was left open the other would be shut.
401. The fact of the accident having occurred caused you to take extra precautions? I always have a second door on the main level.
402. You said in your previous evidence at the judicial inquiry that you had abandoned a portion of the mine where the pillars were being taken out? Yes, where the accident occurred.
403. But you did not abandon any portion until after the accident? Not until after the accident.
404. It would appear from what has been stated elsewhere that you had abandoned a portion of the mine prior to this accident, and I want to know if it was in consequence of the gas existing there that it was abandoned? No, it was not abandoned until the accident occurred.
405. And when the accident occurred you expected, in any case, to terminate operations on the following Saturday? Yes.
406. I understood you to say that the workings where this accident occurred were examined with a safety lamp on the morning of the day on which the accident happened? Yes, that is correct.
407. And you also examined the place where the accident occurred during the afternoon? Yes.
408. That is the usual practice? Yes.

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409. Had you any reason to fear a sudden outburst of gas when you took the precautionary measure of having a second examination? No, I could not say that I had any reason, more than that it has been expected since we first started to examine them every morning, and to go round each dinner time to examine them again.
410. But it is not the usual practice to examine the mine a second time unless you have reason to fear that something special is likely to happen? I had no special reason for it.
411. Was it not in consequence of the likelihood of your meeting a considerable quantity of gas there that you took that precautionary measure? No, I cannot say that it was.
412. Did you do that in any other parts of the mine? That was the only part that was working.
413. But when other parts were working did you examine them a second time? Yes, generally; perhaps every other day.
414. Then it was because of the extra quantity of gas being found there that you examined the mine a second time? No.
415. What area of ground is excavated on the left hand going down to the dip, and what area is excavated on the right hand going down to the dip? To the left there is very little; it is almost solid coal there. We did not go back on to the fault; we touched the fault on the bottom level, and ran along the fault; but the coal next the fault was very burnt, and not very good coal, and a portion of it had to be left on, as complaints were made that it was bad coal; so I just simply cut almost straight uphill. The further we went up the further the fault lay off, and I almost went straight for the dip level.
416. What area would be covered by that portion of the dip that we went down—the side where the accident occurred? About fifty yards in from the dip.
417. And what length? One hundred yards. There were pieces of pillars left in at certain distances to prevent crushing on the roof.
418. What is the distance between the two levels? Two chains.
419. That is all excavated? Yes.
420. In these large excavations do you not think it possible that there were considerable accumulations of gas in the cavities created by the fall? No. I could not see why there should be any very great cavity.
421. You have already told us of a large fall which was 6 feet thick? Yes.
422. And others of lesser size. Did you examine the cavities every day? Yes, every day that I was there, or the overman would do so.
423. At what time were they examined? Every morning.
424. Then between one morning and another was there not plenty of time for the gas to accumulate in the cavities? In the bottom section we could always find gas coming out of the falls. In the fall above or halfway down the dip no gas has been seen.
425. But, notwithstanding that gas might not have been seen, I suppose you will not dispute the fact that gas might be there? In the dip fall I should say so, but in the bottom one I would not be so sure of it.
426. Gas, of course, as you know, varies in quantity very considerably, and in the suddenness with which it is observed? That depends upon the pressure that might be on it.
427. On the day of the accident was there any fall in addition to the ones to which you have alluded? The overman says that he heard a rumbling noise.
428. That being so, would that not be sufficient to force out gas that had accumulated in these cavities near where the men were working? From where?
429. From where the gas had accumulated. Would not the concussion be sufficient to force the gas out where the men were working? If there had been any gas, and there was an extra fall, there is a possibility that it would have been forced out; but, as I say, we never saw gas there.
430. That is nothing? At the foot of the dip I do not see how it would be possible to force the gas against the quantity of air that was going in.
431. There are numbers of cases where gas has not been seen at all. There is no guarantee that because gas has not been seen it might not accumulate in the cavities. Would you say that there is no likelihood of gas having accumulated in those cavities notwithstanding that you had seen nothing there before? No, I would not say that.
432. Then the probability is that those cavities were charged with gas on the day of the accident; that the rumbling noise which was heard was another fall, and that that forced the gas out and caused the explosion? There is a possibility of that.
433. Only a possibility? Had I seen gas in the place before, I should certainly say it was likely, but I cannot say that at present.
434. But you have seen gas down the dip? At the foot of the dip.
435. Not at the top of the dip? In the main level.
436. At any rate, gas has been discovered in the dip from time to time? Yes.
437. What is the distance from the main level where gas has been seen to where the men were working? One hundred and twenty or 130 yards.
438. Where this cavity was, was 40 yards to where the men were working? Yes.
439. Then you would not say it was impossible or even improbable that it was from that cavity that the gas oozed out? I would not say it was impossible. It is quite possible.
440. Then do you disagree with the pavement theory? Oh, I do not know. The bottom coal has always been the coal that contained the gas.
441. But the gas would make its way to the top? But in the dip we never cut down to the bottom coal. The bottom coal is left on because the stone gets too thick to work.
442. I think you told us that there is about 120 yards where the bottom coal is left on? Yes.
443. And how many yards from that portion of the dip did the accident occur? About 100 yards.
444. The spot where we were was 100 yards from the bottom of the dip? Yes, and 100 yards from the top of the dip.
445. Was there any means of ventilating that portion? The main airway was kept open right down to the water.
446. How long is it since the water reached that point where we were? It was not to be seen there a fortnight ago.

447. I want to know if it was possible for an accumulation of gas to get down there? I do not think so. I cannot see how it could get back against 14,000 cubic feet of air per minute.
448. Not if the air could reach it? The air was playing on it.
449. But are there no falls below that? Yes, and the gas makes for those falls.
450. You are speaking of the portion we saw? Yes, right to the top of the fall.
451. Isn't it a reasonable assumption that the gas accumulated there, and by some pressure was forced out to where the men were working with naked lights? It is possible.
452. I think you also said in your evidence that in taking out pillars you never knew gas to come away in such a quantity as to cause any explosion? Out of the coal.
453. I am speaking of the coal? That is what I alluded to.
454. Would that hold good with regard to the bottom coal as well? Not if it was covered by 3 feet of stone.
455. Supposing it occurred time and again that gas accumulated in the old workings—it certainly did accumulate in the old workings at Bulli—and there were no means of cleaning that gas out by ventilation, and falls were to take place, would not the inevitable result be to force the gas out to where the men were working? Oh, yes; there is no doubt about that.
456. You say you never knew gas to come away, in taking out pillars, in such quantities as to cause an explosion? Out of the coal, yes.
457. But you would not say that in regard to the bottom coal? No; it is covered by 2 or 3 feet of stone.
458. What thickness? The bottom coal is 20 inches to 2 feet.
459. Do you think the amount of gas in that bottom coal is sufficient, if relieved, to cause an explosion? I don't think so, judging from what I have seen.
460. When you say you have never known gas to come out in the way you have mentioned, do you speak from your own knowledge, or from what you have heard from other people? From what I have seen. I have never known gas to come away in any quantity under such circumstances.
461. Is it your opinion that the gas which caused the explosion in this accident came out of the bottom coal? I would not like to say anything about the matter at all; it is a mystery to me; I cannot say where it came from.
462. Is it true that a meeting of the men was held on the Monday or Wednesday morning to decide whether it was safe to go down that mine where the accident occurred? I never heard of it; I never heard of anything of the kind at any time. I am sure it is not true, because the men who were killed would have been the very ones to let me know if they had had any suspicion of danger. Houston was not a man who would be afraid to tell you if there was any danger, and he never complained of being afraid of any gas there.
463. Neither Mr. Houston nor any of his colleagues ever complained that there was any danger? Never at any time.
464. Nor that they were afraid to work there? No.
465. And no other men in the mine complained? No other men in the mine could complain, because there was no gas where they were working.
466. Of course, in your experience, you have found men working in one part of a mine who had, perhaps, a little more confidence than others in approaching the manager with complaints? I have always made it a rule during the nine years I have been there to encourage the men to let me know of anything that was dangerous.
467. During the whole nine years of your experience there have you never had any complaints that the men were afraid to work in certain parts of the mine, in consequence of the accumulation of gas? Not in consequence of the accumulation of gas, but I have had complaints for other reasons, as, for instance, a soft roof, and other things.
468. Not in consequence of the accumulation of gas? Not once that I can remember.
469. You say it is not usual to have sudden outbursts of gas when taking out the pillars. Do you speak of your own knowledge? Yes—out of the seam of coal itself.
470. But I think you said you did not confine your observations altogether to the top coal. You still think that gas might come from the bottom coal? Yes; for a certain time after, until it gets time to drain off.
471. But is it your opinion that there is sufficient gas lodging in the bottom coal and pavement to give off sufficient gas to cause an explosion such as that which recently took place? Yes; I believe so, unless it could get drained off otherwise. Judging from what I have seen in driving levels, the greater part of the gas comes from the bottom coal, and unless it can get off some other way there was sufficient gas in the bottom coal to rise and burn those men as it did.
472. But do you not think that the pressure that has been on that part of the mine where the pillars have been taken out and the cutting of the bottom coal at the top of the dip would have caused that gas to have drained out prior to the accident? No; I do not think so. The bottom coal is not a clean coal. It is not a free coal. There is not such a thing as a skin in it. There are no pores in it, and it will not let water through, so that any gas that might be in it would not get very readily out of the coal.
473. But is not the floor itself sufficiently porous to admit of the emission of the gas? No. We had to shoot that stone with dynamite. There is a big iron band in the centre of it, and sometimes we could not shoot it with powder.
474. Then do you really believe that the explosion arose from that source? Well, I have no real belief. I could not say the gas came from a certain part. It might have come from the 100-yards level, or from the upheaval of the bottom.
475. Do you not think that the amount of ventilation you had there, the gas having to come from the bottom coal, and the ventilation being largely confined to the bottom and not to the top, would be sufficient to prevent the gas from rising? That is certainly one of the things which goes against the theory of the gas coming from the bottom coal. At the same time it is a very wide space there and the air was spread over a large space. Until you get to the bottom of the pillar the air was not confined to any small area.
476. Do you think sufficient gas would accumulate in that confined area to have caused that explosion? I do.

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477. Is there a sufficient area there? Oh, yes.
478. Notwithstanding the sweep of the air? Well, I can hardly think so.
479. So that so far as the theory is concerned of the gas having emanated from that source, you think that the air would be too strong? Yes, I think so.
480. Therefore the theory of the gas having emanated from the bottom coal pretty well falls to the ground? I am not altogether prepared to say. Gas is a very oily thing, and the air will not take it away at once. I have seen a strong current of air sweeping through a body of gas which could not be moved until we put up a piece of canvas at the bottom.
481. Then, if the air sweeping round the bottom was not sufficient to destroy the strength of the gas emanating from the bottom coal, is there not a very strong likelihood of the gas accumulating at the top, where the air could not reach it so well? It was at the top side that it was fired.
482. Here is a portion of floor where you think the gas might have come from: there is a greater chance of that being well ventilated than a portion of the roof that has fallen and where a cavity exists? Yes.
483. Then I think, so far as gas being there in consequence of the sweep of the air, that destroys the idea of the gas having emanated from the floor and not from the top? It is not impossible that it might have come in from the coal above. It might have come in there through some additional fall, but I certainly examined the place for gas and found none.
484. Is there not a strong probability that the gas would have come from the coal in the top rather than from the bottom, considering the constant sweep of air there was? Yes, that looks very feasible.
485. The balance of argument, you think, lies in that direction? Yes.
486. You say that Torbanlea is not a fiery mine? Yes; I said I considered it not a fiery mine.
487. Where do you draw the line between fiery and non-fiery mines, seeing that you have in that mine already experienced considerably quantities of gas at different times? So long as I was able to keep the place entirely free from gas by means of a good current of air it could not be called a fiery mine.
488. Supposing you left the mine to-day with only a moderate quantity of gas in it and returned to-morrow and found what you would not consider a moderate quantity, what would be your opinion then? I would then consider it a fiery mine. If I was unable to entirely sweep the gas away and leave the mine perfectly clean, then I would call it fiery, but if only a quantity was exuding, which I could get out, I would not consider it a dangerously fiery mine.
489. In taking out the pillars in any particular part where you have discovered gas, don't you think it would be a very wise precaution to use safety lamps? Whether you have seen gas or not?
490. No, where you really know that gas has existed? I think that would always be done. It would have been done if we had seen gas where the pillars were being taken out.
491. But having seen gas in the neighbourhood, and being likely to meet it in considerable quantities, would it not have been a wise precaution to use safety lamps so as to run no risks? It would certainly minimise risks so long as the men did not tamper with the lamps, but, you know, you are far more liable to have tampering in a place where there is little gas than where there is much.
492. The way we used to do was this: The pillars that were closest to the main current of air were worked with naked lights, but alongside of the waste, where gas is likely to accumulate in the cavities and excavations, we in every case used safety lamps? You mean at the pillars next to the waste?
493. Yes, the whole range of pillars? It certainly would be more safe to work with the lamp.
494. I know that miners have an objection to the lamps, but I think a safe rule to adopt is to use them along the whole range of pillars near the waste, while of course in the main current the same necessity would not exist? Yes, I think that would be a good method of preventing explosions.
495. Do you think that would be a wise precaution? I think it would be wise to use safety lamps next the waste.
496. How many safety lamps had you at your mine? Four.
497. On the day of the accident? Yes.
498. There were seven persons—the overman, the boy, and five men—engaged that day in the part of the mine where the accident occurred, and if they had been expected to work with safety lamps, how could seven men do that with four safety lamps? I did not ask them to work with safety lamps. If I had asked or wanted them to work with safety lamps I would have had to get lamps for the seven men, or have stopped the work until they had been obtained.
499. The reason you did not have more safety lamps there was because you did not anticipate the existence of a quantity of gas? Just so.
500. So that the statement that the men dreaded working there is rather unfounded? It is ridiculous nonsense.
501. I think you said that in addition to the natural ventilation you had a fan? Yes.
502. What was the capacity of that fan? About 16,000 cubic feet a minute.
503. Did you run that fan night and day? Yes, when necessary.
504. When did you think it necessary? When there was any accumulation of gas; and then I would keep it going night and day until I got the gas away.
505. Did you usually run the fan on Sunday? No.
506. Never? Only when necessary.
507. Did you run it on holidays? All the week through it ran. I aways made it a rule to examine the mine myself on Sunday night, looking for gas, and if I found any accumulation of gas the fan would have to start straight away.
508. Then you simply ran the fan night and day when the air was deficient, or when you anticipated some gas? Yes.
509. And you stopped the fan when you thought it was unnecessary? We stopped it at night, and started it again in the morning.
510. Supposing there was a large accumulation of gas during the time the fan was stopped, and you had not taken that precaution which, perhaps, under more extreme circumstances, you would consider necessary, loss of life must ensue, must it not? That could not very well happen; because no one was allowed in the mine until it was examined.
511. No one except the man in the morning? That man, or myself.
512. Had you any means of registering the capacity of the fan? Mr. Fryar registered the capacity of the fan with his anemometer on several occasions.

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513. You had no regulator or water gauge on the fan itself? No, there was nothing at all to indicate its capacity, except that it was kept going at so many strokes per minute.
514. Then, it rested solely with the engine-driver as to the number of revolutions of the fan per minute? Yes.
515. And if the engine-driver was lax in the performance of his duty the fan might run at a lesser speed? *Yes, that is possible.*
516. Don't you think it would be better in all matters of that kind to have some system of registration, so that you could see the velocity of the fan at all times during the year? The number of revolutions the fan had made in twelve hours?
517. Yes? Yes, that would certainly be on the right side.
518. You are working the fan now at the Burrum? Yes.
519. Don't you think it would be wise to have an indicator on the fan? Yes; it would be a better guide, though there is not much chance of its falling in speed, because it is connected with the main boilers, and the pressure is kept steady all the day through. Here it had a little boiler for itself.
520. Supposing the mine stopped work for a whole week at a time, would the fan be always running? Yes; every day except Sunday.
521. You say you only measure the speed of the fan occasionally. Have you any registration of that measurement?- I think you will find it in Mr. Fryar's reports. At any rate I take a note of it at the time.
522. Have you a book at the mine in which all those things are recorded? I have a book for myself and one for Mr. Fryar.
523. Are the notes duly made and dated? Yes.
524. Can the Commission have that book? Yes.
525. Do you keep a register of the quantity of air travelling through the different parts of the mine where the men are working every day? No.
526. Would that not be a very desirable thing to do? Yes; I had only one split.
527. Had you only two sections of the mine working? Yes.
528. Had you had more sections, I suppose you would have had more splits? Oh, yes.
529. Have you any record of the quantity of air travelling through the mine on the morning of the 21st of March? No.
530. The air was not measured that day? No.
531. Have you any register of the usual quantity of air travelling through the mine a few days before the accident? No, it has not been measured just lately. I have no instrument of my own, and the air passed through is simply measured by Mr. Fryar when he comes round.
532. Mr. Fryar would only visit you every few weeks? Yes.
533. In the meantime, would it not be desirable to know the quantity of air travelling through the workings? It would certainly be desirable; it would do no harm to have that information.
534. I think you said the overman reported to you that he visited that place twenty minutes before the accident? Yes.
535. And he saw no sign of gas? No.
536. How can you account then for the sudden outburst of gas? I really cannot account for it.
537. The overman examined that part of the mine with his safety lamp? Yes.
538. So that you never anticipated anything occurring on that particular day any more than on any other day? No; if I had anticipated anything occurring on that day I should have had the mine idle.
539. *It has been alleged that you stated that that thing had been giving you very considerable anxiety* for six months before the accident? There always has been a little gas coming off the bottom fall at the foot of the dip. That is the only thing that could give me any anxiety, and I have said that on several occasions.
540. Did you not state to a reporter of the *Wide Bay News* that that particular district had caused you very considerable anxiety for six months before the accident, and that you had watched it with very great care? Yes, just as I have stated to you now—that there was always a little gas coming off that bottom fall. But that same reporter went to Maryborough, and reported that there must have been a lot of gas on that day, as he himself felt it coming up the downcast shaft, so that not much reliance can be placed on his report.
541. Then the statement you are reported to have made to that man wants some qualification? It wants a lot of that. *I said to him, as I have said to several others, that there was a little gas coming off* the bottom fall at the foot of the dip, and that I was watching the gas, because I knew that if it went to any length it would be dangerous.
542. Was the quantity of gas sufficient to cause you that grave anxiety which that gentleman stated you expressed to him? I never said anything about grave anxiety; that is a bit of his own making up, for I certainly never said anything about grave anxiety to him.
543. So that you had no extra fear on that particular day, or on days prior to that, that the danger was any greater than it had been before? No; if I had had the slightest fear I certainly should never have kept the men in the dip. I was told on many occasions before that whenever I wanted to stop working in the dip to do so straight away; so that there was no necessity for working the dip, except to take out the coal.
544. How long have you been working at those pillars? About twelve or fifteen months.
545. During which time you have seen more or less gas? Very little gas at the pillars. When we were driving into the solid coal we saw a little.
546. Do you keep a barometer and thermometer at your mine? Yes, I have a thermometer there, and a barometer at the house.
547. When the barometer sinks, would you take extra care? Yes, I have always done so.
548. Do you keep the thermometer regularly at the pit? When I was living there I kept it at the side of the pit, and the barometer at the house.
549. Would it not be better to have it at the pit, so that all the men could see it, and take extra precautions when necessary? Oh, yes.
550. Have you had such things as gob fires in your mine? Yes, we have.
551. How long is it since you had one? About ten years ago.
552. Not since then? No.

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553. Do you bring up the slack out of your mine? All coal goes up.
554. Do you not think that gob fires are exceedingly dangerous where you are likely to meet with gas? Yes, no doubt of it.
555. *By Mr. Rankin:* You say that until the roof broke you did not see any gas? Very little.
556. And that it accumulated after that? Yes, on the top of the fall.
557. Don't you think that that goes to show that the gas must have come from the top? Well, this portion is next to the fault, so that I think it must have come off the fault.
558. Very likely the fall of the roof might have broken into the fault? Yes.
559. It is very probable it would come off where that fall took place? Yes, it is probable.
560. That strengthens my idea that the gas was likely to come from the top. It would be very easy for your current of air to cut the end of the gas off and leave a portion of it in the cavity, and after another fall came the gas would be knocked out. Do you think that is likely? Yes it is likely; there is no doubt of it.
561. You never saw a sufficient quantity of gas to make you feel that you ought to work with safety lamps altogether? On two occasions there was an accumulation of gas in one of the rooms.
562. It was not a usual thing for gas to accumulate in any quantity? Oh, no.
563. You never anticipated having to work with safety lamps altogether? No, I never saw any necessity.
564. You never ordered any lamps for that purpose? Not with the idea of working with the Davy lamp solely.
565. When you were driving your dip down were you troubled with gas? Very little. You could hear it bubbling in the water, but I do not remember having seen it while the dip was being driven down.
566. *By Mr. Glassey:* In examining the mine in the morning did you make any mark to indicate to the men that the different places had been examined? Yes, the day of the month was put up every morning. I put it on the roof or any level place that was handy.
567. So that each man could see at a glance that his place had been examined? Yes.
568. And you have a space provided where the men may stop until the examination takes place? They never go beyond the top of the dip until the examination has taken place.
569. *By Mr. Thomas:* Have you any idea yourself that a fall took place that day? The only thing I can say is, that in that level, 100 yards down, there had been an addition to the fall between Monday morning and Wednesday morning.
570. *By Mr. Glassey:* Below where we were? Above where you were. There was a fall of about 15 yards further up. That is the only additional fall that I know of, and that is what I consider Caldwell must have heard before the explosion took place. He himself says that was an addition to the fall since he examined it in the morning. That must have come away shortly after the morning examination.
571. *By Mr. Thomas:* And the air goes through that and comes back to the men? Yes.
572. And of course the additional fall would force the air out? Yes.
573. *By Mr. Fryar:* What do you mean when you refer to the ventilation being confined to the bottom? I understand that the quantity of air would be stronger at the bottom than at the top.
574. What would be the reason for that? Really, I cannot account for it.
575. Would it be because there was so much gas at the top that the air, being heavier, got down to the bottom? I do not think so.
576. Would it be because the roof was rougher than the bottom, and, consequently, the air would be more retarded in its progress along the roof? The only way in which I can account for it is that there was a greater width at the bottom.
577. Do you say that was the case? That was the case.
578. You actually say that the air was travelling quicker at the bottom than at the top? Not quicker, but there was more of it.
579. It seems to have been assumed that the air was travelling more at the bottom than at the top. Is that merely a supposition or a reality? It would be a supposition on my part. I could not say the air was not travelling at the top.
580. I want it clearly understood whether it was a fact that the air was travelling quicker at the bottom than at the top? I could not say that.
581. *By Mr. Glassey:* In the ordinary course of a current of air, is the current such that it will go 10 feet high as easily as it will go 4 feet high? Oh, no; not unless you block it, and make it go up into the roof.
582. Then was it blocked in such a way as to make it go up into the cavity where the fall took place? No.
583. Then in such a case would it not be much more likely that the air would be stronger for a given height than beyond that given height? It would not travel into the fall unless there was something to compel it to go there.
584. There was no blocking of the air and carrying it up?—That was not done? Not at the top fall.
585. Then so far as the natural current of air was concerned it was much more likely to destroy the gas as it emanated from the bottom than it could possibly do in the cavity where the fall took place.—Is that so? Yes, with nothing to compel the air to go up.
586. *By Mr Fryar:* Have we any evidence touching the origin of the explosion—where the gas was ignited? There is only one thing I can say on that matter. Caldwell told me he heard Alec. Houston shout to his boy to put it out. From that I take it that the boy must have been the one who lit the gas.
587. *By Mr. Glassey:* And I presume it is not too much to say that it must have been there to light? There must have been gas there. He was heard to shout "Put it out, Jack, put it out."
588. It must therefore have been known that it was there? I can only say that the gas might have slowly come up. It would first start in a yellow flame and roll about until it got to the main body. Houston would therefore have plenty of time to shout "Put it out, Jack," and no doubt the boy had plenty of time to put it out before it reached the main body if he had had anything handy to do it with.
589. *By Mr. Fryar:* There has been a suggestion that the gas emanated from the floor. Can you give us any idea of the origin of that suggestion? The only thing is that upheaval which I showed you about the pillar where Gambie and the other men were working. That is raised about a foot above the ordinary level, and it is the only reason I can give for the suggestion.

590. *By Mr. Glassey:* When did you notice that rent? On the day of the accident.
591. You never observed it before that? No.
592. How far is that away from where the men were working? It is just behind where they were working. Had we attempted, we could easily have found the rent there.
593. *By Mr. Fryar:* Have you read or heard the overman's evidence touching the extent of the explosion? I have read a report of it in the papers; that is all.
594. You do not know from himself personally what, in his opinion, was the extent of the explosion? I have asked him, and he seemed to think there was no violent explosion—that it just seemed to be a flame; and that there was no serious knocking about such as one would feel in an explosion.
595. Can you give us a rough idea as to the distance from that rent, or upheaval, to where the Houstons were working? Six or 7 yards straight below them, I should think.
596. The Houstons were towards the rise? Yes.
597. Can you tell us how Gambie was situated with respect to it? Gambie, Griggs, and Johnstone were the three who were working at the bottom pillar.
598. Were they below the upheaval? They were below the pillar, the thickness of that little pillar—about 3 or 4 yards square—was between them.
599. How far would Caldwell and the boy Anderson be from the upheaval? Six or 8 yards.
600. Were they to the dip or the rise, or on the level across? On the level across.
601. Did the explosion hurt Caldwell or Anderson? No, they were not touched.
602. *By Mr. Rankin:* They were on the other side of the dip? Yes.
603. In the level on the left hand side of the dip going down? Yes.
604. *By Mr. Fryar:* What was the distance from where those men were working to the fall in No. 1 level? Between 30 and 40 yards.
605. There were nine other men working in the immediate neighbourhood, were there not? Yes; in the level above that again, 20 yards further up.
606. How far would the nearest man to the fall be from it? The men on the level above?
607. Yes? That is going by the airway?
608. Yes? Round by the airways they would have to go 60 or 70 yards, but straight through the pillar of muck they would have to go only about 20 yards.
609. Was the pillar of muck air-tight or gas-tight? It was not air-tight by a good bit, and there was plenty of air going through to them.
610. Are you aware that Caldwell told us at the recent inquiry that the flame seemed to go to them for a second and then die out? Yes; he told me that too.
611. Looking at the facts as you have described them, would it be likely that the quantity of gas lodged in that crevice in the roof would be expelled by a fall, and come out and explode, and only be confined to that small circle of a few yards—taking the outside measurement you have given it is only 8 yards? You mean that the air would be sufficient to kill the gas, or to mix with it in such a way as to keep it from exploding?
612. What I say is this: If the gas had been lodged in a cavity in the roof, and a fall occurred, causing the gas to explode, is it likely that the explosion would have been confined to that limited radius of 8 yards at the outside? I do not know, I am sure; the question is rather a puzzler.
613. It is a very natural question to ask? The quantity of gas would not be likely to come out in a bunch, so that it would be quite natural to expect that when the gas was exploded it would go right back into the fall again.
614. *By Mr. Glassey:* Would it not depend on the quantity of gas that would be forced up by the fall? It would depend upon that, and whether it was forced into the pit or not. If it went away, and left a long tail behind it, it would go back into the fresh air again.
615. If a larger quantity of gas had accumulated, and that whole quantity was forced out, you would have a larger explosion? Yes.
616. But if there was a limited quantity forced out, you would have a smaller explosion? Yes.
617. *By the Chairman:* But could a limited quantity be forced out in one bunch? I can scarcely see how it would be possible to force it out in one bunch.
618. *By Mr. Fryar:* I want to know whether you see any possibility of a bulk of gas being driven out like that, and then when it explodes being confined to such a very limited area? I really cannot say; I do not think the gas would come out and leave nothing behind it; there would be bound to be a tail that would go back into the fall.
619. You have told us that there is an outburst in the floor, right in the centre of the floor? Yes, where the five men were working.
620. Two men were burnt from 6 to 8 yards away on the high side, and three men were burnt from 6 to 8 yards away on the lower side? Yes.
621. Has it been reported to you whether any of the men in the upper level saw any sign of the explosion? No.
622. There was nobody burnt there so far as you know? No, none of the men inside the door; one of the boys got burnt a little bit in the back.
623. *By Mr. Glassey:* What was his name? Irons.
624. *By Mr. Fryar:* Was he near the bottom or the top? Near the bottom where the explosion occurred.
625. *By Mr. Glassey:* What is the distance from there to the place where the explosion occurred? Less than 30 yards.
626. *By Mr. Fryar:* That is to where the boy was? Yes.
627. Was there any rubbish or coal on the floor between where he was and where the explosion originated? In Houston's place he had got his coal stacked on the side of the road, and there would not be more than 20 inches between the top of the coal and the roof, I think.
628. And you had been up on that fall with a safety lamp on the Monday? Yes.
629. And did not see any gas? Not a particle.
630. On that same occasion, or on any previous occasion, did you see that upheaval in the floor? No; I never noticed it until after the accident.
631. *By Mr. Rankin:* Neither did Caldwell? No; or if he did, he did not mention it to me.

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632. *By Mr. Fryar:* Have you known any such outburst in a floor previously anywhere in Scotland? Yes, in one part, but that was on the side of a fall where we had an outburst of gas from the floor—from a seam 4 feet underneath.
633. *By Mr. Glassey:* What was the thickness of the seam? Somewhere about 4 feet, and it was on the side of a fall.
634. *By Mr. Fryar:* Then you have not actually been within hearing or sight at any time of these escapes of gas? No, I cannot say that I have.
635. You do not know the noise that the gas makes? Yes, I think so. If it is in water it makes a bubbling noise.
636. But speaking generally? If it is coming out of the coal you can hear it blow like steam off a boiler.
637. I am referring simply to the bursting of a floor? Did you ever hear the bursting of a floor? No.
638. Your experience has not led you in that direction? No, I have had no personal experience.
639. All the cases that you have spoken about as being seen down below have been near the fault? Yes.
640. Were there no falls on the upper part of that excavation other than the ones to which reference has been made? No, that was the only one.
641. Then if the gas came out of the fault and another fall expelled it from the cavity, where would it go? It would go into the return air way.
642. In preference to being driven up against the air way? Oh, yes.
643. But supposing there was sufficient gas in that fault, and a fall came away and drove it against the air over 100 yards, can you imagine the explosion confining itself to that small space? No, I do not think so.
644. *By the Chairman:* I thought I understood you to say in answer to Mr. Glassey, and I thought at the time it was a contradiction of what you had said before, that you were of opinion it was possible the gas from the bottom fault might have been driven up to where the men were? No, I did not say that.
645. *By Mr. Fryar:* Have you any idea of the quantity of air that would be required to mix with a quantity of gas before it became explosive? Eight or 12 feet to 1 foot of gas.
646. Consequently the bulk would be increased ten times? Yes.
647. Have you any idea of the expansion of gas when it explodes? Yes, it expands to about three or four times its original bulk—that is, 1 foot of it on the roof would fill a 4-foot space full of fire.
648. I mean of the explosive mixture? Exactly.
649. Supposing we took that circle minus the pillars of coal, what thickness of flame would there be? According to what Caldwell told me there must have been from 2 to 2½ feet thick of flame.
650. The men in the upper level were working with naked lights? Yes, they were all working with naked lights.
651. Although you had safety lamps, there was no pretence of working with them? No.
652. Had the overman made his usual round? Yes; he said he made his usual round.
653. Did he go in as far as the fall in the upper level? I do not think so. He did not mention having examined the fall in No. 1 level.
654. Where was the fall to which allusion was made by the overman? It was between thirty and forty yards from the men.
655. But the fall which Caldwell thought he heard—where would that be? He had no idea. He just heard the noise.
656. *By the Chairman:* You know the provision in the Act whereby persons employed in a mine may, at their own cost, appoint two competent miners to inspect the mine, and the persons so appointed shall be allowed once at least in each month to inspect it? Yes.
657. Was that clause ever made use of in the Torbanlea mine? None of the men have made any application in reference to that matter.
658. *By Mr. Glassey:* Can you give the Commission any idea as to why the men did not take advantage of that clause—was it through fear or timidity? No, there was nothing of that kind; the only reason, as far as I can see, was that there was no necessity.
659. *By the Chairman:* Would it be because of the cost? Well, there would be very little loss to them; it would be only half-an-hour in the morning.
660. *By Mr. Glassey:* If it was a big mine it might mean a day? There might be something in that.

(Torbanlea.)

THURSDAY, 26 *APRIL*, 1900.

PRESENT:

MR. RANDS | MR. GLASSEY, M.L.A.
MR. FRYAR | MR. RANKIN
MR. THOMAS.

MR. WILLIAM HENRY RANDS, CHAIRMAN.

JOHN CALDWELL, Overman at Torbanlea Colliery, examined:

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661. *By the Chairman:* You are overman and fireman at the Torbanlea Colliery? Yes.
662. How long have you held that position? From eleven months before the explosion; that is twelve months altogether.
663. Were you working in that colliery before that? Yes.
664. In what position? Roadsman.
665. Will you state what experience you had in coal-mining previous to going to Torbanlea? I had eight years' experience in collieries in the old country.

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666. Which part? In Ayrshire, Scotland.
667. And then you came out here? Yes.
668. Did you go direct to the Burrum Coal Field? Yes, the first work I had in Queensland was at Torbanlea; that was in the old mine at the opening of it.
669. How many years' experience altogether have you had in coal-mines? About twenty-three years' experience in coal-mines altogether; and I have been in a gold mine about two years or two and a-half years.
670. What mines did you work in in Scotland? I worked in the Eglinton Iron Company's mine.
671. Where is that situated? At Lugar.
672. Have you been in fiery mines? All the mines there have a little gas in them, but there is none that you would call a fiery mine. None of them was worked with safety lamps; but they were examined every morning with safety lamps.
673. You have never worked in a mine in which safety lamps were considered absolutely necessary? No.
674. As overman it was your duty to examine the Torbanlea mine before the men entered of a morning? As fireman it was.
675. Were all the working places examined every morning? Yes.
676. Was the examination invariably made with a safety lamp? Yes.
677. What kind of lamp was it? A Davy lamp.
678. And having made an examination of the mine, did you enter a report of that examination in a book? Yes.
679. When did you do that? Every morning. After I had examined the mine I told the men they could go along, as things were right, and then I went straight away to the surface, and made my report.
680. In that examination you would include all places that were open? All working places.
681. Would you examine the places where there had been a fall of roof if they were accessible? Yes, of course, if I thought it was needful. I examined all the old workings down to the fall of the dip every morning.
682. Were you in the habit of examining the fall which took place in the 100-yards level every morning? Yes.
683. Did you ever find any gas there? No.
684. No accumulation of gas at all? I never could find any.
685. And you also examined the falls at the bottom of the dip? Yes.
686. Did you find gas there? Yes, I found a little bit coming off there.
687. You generally found it there? Yes.
688. Did you examine the workings on the morning of the 21st March, the day of the accident? Yes.
689. Did you on that morning also examine the fall in the level? Yes, the fall in the dip level.
690. The 100-yards level? Yes.
691. Did you find any gas that morning in the working places? No, they were all clear that morning.
692. Nor in the fall? Nor in the fall in the 100-yards level.
693. You found none at all? No.
694. Where did you first gain your experience in examination for gases with the Davy lamp? It is a strange question; I never did much in examining till I started in this colliery, but I have seen gas in the old country, and have seen it examined.
695. But it was not your duty before you were fireman at Torbanlea to examine the mine for gas? No. I had a brother in the old country who was a fireman, and he showed me how it was done.
696. On the 21st of March did you a second time examine the working places in the Torbanlea mine? Yes.
697. About what time? I went all round the working places between 6 and 7 o'clock in the morning, and then after dinner I again went down to the particular place where Houston was working, and examined it. Then I left my light with Houston, and went with a safety lamp through the old workings and examined them. I could not find anything; the mine was all clear, just as it was in the morning.
698. You did not on that day go particularly to the place where the Houstons were working—you went all round as well? Yes, I went all round.
699. It is your duty to examine the working places every shift? Yes.
700. What I want to know is whether you went twice specially that day, or whether you usually went twice a day? I usually went twice a day.
701. How long before the accident was it that you made your second examination? About a quarter of an hour.
702. And during this second examination did you find the working places practically free of gas? Yes.
703. That is, the gas would not show on the Davy lamp? No.
704. In Mr. Sharp's absence from the mine who is in charge? I am.
705. From what experience you have had would you look upon the dip workings as generally fiery and dangerous? No; I would not call them fiery.
706. And you would not consider safety lamps necessary? No.
707. Not even though you say you found gas at times in portions of the workings? Even though I saw that, when the current of air was in the proper course, it was safe.
708. Did you at any time during the working out of the pillars in the dip consider it advisable as a precaution to use safety lamps? No; I never did.
709. You noticed nothing at all that you think would warrant their introduction? No.
710. Were safety lamps used in working away any portion of the pillars in the dip at any time? There were about three days when they worked with them; that was just against the fall.
711. That is in the lower part of the dip? Right away down at the very bottom.
712. And that is the only occasion you know of their use? The only time.
713. Were they never used in taking out the pillars higher up—pillars that were next to the worked out ground? No.
714. If any miner noticed gas in the mine, would it be his duty to report it to you? Yes.
715. Did any miner ever report to you the occurrence of gas? No; I do not remember.
716. Not in any single instance? No.
717. Had the miners the use of safety lamps to find out if gas was present? No.

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718. And so they would be unable to find out for themselves, having nothing but naked lights? If it was present and they were working with naked lights they would find out.
719. They would find out by means of an explosion? Yes.
720. But they would not be able to discover it without causing some such accident as happened on the day of the accident? No.
721. Do you not think the miners ought, at any rate, to be supplied with safety lamps so that they could test their working places if they wished to do so? I cannot see that it would be required when the places are tested before the miners go in.
722. But the present case is an instance of where the workings were tested just before the accident? But if the miners had a lamp to test the workings in the present instance, what would be the good of it when they had their naked lights there?
723. They could surely test, now and again, to see if a slight quantity was present. You do not think it would be any use, even though they were working with naked lights, to have a safety lamp for the purpose of examining for gas only? No; I do not see how it would be of much use.
724. Have many falls occurred while the pillars were being taken out? Only one at the bottom of the dip and that one at the 100-yards level.
725. When these falls took place did they force out any quantity of gas into the workings? No. When the one in the 100-yards level fell I was in the place at the time. It did not cause any gas. It caused a great current of air to go through the pit—in fact, it bumped the doors; but there was no gas with it. After the fall I sent to the engine-room for my lamps, and I went as far into the fall as I could get, and could not find anything. Then I went to the top and never got any gas.
726. If there had been gas you would have expected to find it in the workings after the fall? Yes. There was no gas there. We never did find any in that first fall on the 100-yards level.
727. How long after the accident was it before you examined the workings again? The next morning.
728. And was there any gas present in that fall at that time? No.
729. Did you notice any difference in the fall the next morning when you examined it? No.
730. There was no appearance of any extra fall having taken place on the following morning? No, there was no appearance.
731. Have you examined that fall since the following morning—the morning of the 22nd? Yes, it was examined by the jury of miners.
732. Did you notice any difference then? Yes.
733. What was the difference? About 14 yards had fallen. It had come nearer the dip.
734. Can you say whether that 14 yards had fallen the day you examined it—that is, on the 22nd? Did you examine it sufficiently closely to know? No. Mr. Sharp and I only examined the top of it, and up through on the other level; that was on the top level. On the 22nd we did not go down into the 100-yards level, but went along the air course to see if it was clear.
735. Then, that extra fall could have taken place previous to the 22nd, and you would not have seen it? Yes.
736. It could have taken place? Yes; but it had not taken place on the 21st.
737. But in your examination on the 22nd you did not go so far as would enable you to say whether it had taken place then? No.
738. Therefore, you cannot say when that fall took place, except that it was between the 21st of March and the day you went down with those four men—that is, the 4th of April? No.
739. Can you say when that fall did take place? No. On the 21st of March, when I was down examining the mine, it had not taken place.
740. The fall must, then, have taken place between the morning of the 21st of March and the 4th of April? Yes.
741. You cannot say any particular date? No.
742. What time on the 21st did the accident take place? Just about 1 o'clock, or it might have been a few minutes after.
743. And where were you at the time? I was down the dip—in the return, pulling up some rails on the road.
744. You had a safety lamp at that time? Yes; while I was working in the return.
745. Did you notice immediately before the accident any occurrence of gas? No.
746. None at all? No.
747. Was any one with you at the time in the return? Yes; Andrew Anderson.
748. Did you notice any noise before the accident took place? Yes; just before—the air rushed in. I thought I heard a rumbling noise, and I said to Anderson, "Listen, Andrew."
749. Have you any idea of the direction of that noise? No.
750. None at all? No.
751. You had no idea at the time? No, I had no idea.
752. Will you describe what you saw and felt at the time of the accident? Directly after I heard the noise I have mentioned, all at once a rush of air came, and as that rush of air came I said to the boy, "The gas is lit, lie down," and I gave him a push to help to knock him down. At the same time I lay down myself. Immediately after the rush of air, a second or so after, the flame came, and then went back.
753. Did you notice any light before you felt the rush of air? No, we felt the rush of air first, and the flame came immediately after.
754. You heard the rumbling noise before that? Yes.
755. And you had time to speak to the boy, and tell him that the gas had lighted before you saw the flame that followed the rush of air? Yes; of course it was all done in a second.
756. Still you had time before you saw the flame to speak to the boy—you knew the gas had lit? Yes, I knew that the gas must have lit, and immediately after the flame was there; it all happened in a second or so.
757. And the flame went back again? Yes, it just came in and hung over the top for a second or so, and then went out.

758. What did you do next? I went away, and sang out to Anderson, asking him if he was right. He said he was. I said, "Get up the dip as quick as you can, Andrew; keep as low down as you can—on your hands and knees"—and we started up the dip and went as fast as we could get.
759. That was up the main dip? Yes.
760. Close to where the men were? Yes.
761. Did you hear the men call out? Yes.
762. When did you first hear them call out? Just as the rush of air came; in fact, all the time the flames were hanging over us they were singing out.
763. Did you hear what they said? At first I could understand what they said.
764. What did you hear? The first thing I heard was Alexander Houston telling the boy to put it out, and then I heard him say, "Jack is burnt." After that I could not discern what they said. While the flames were over us they were all singing out, and it was all confusion.
765. Would you conclude from what you heard that when Houston called out he was burnt himself? No.
766. How far was he from John Houston? I could not say; but they must have been close together.
767. Was Alexander Houston lower down in the dip? I could not say where he was. As far as I can make out, John, the boy, was getting over the top of the coal where they were shifting it out on to the road at the time he lit the gas.
768. You don't know whether they had changed their positions when they were found? No.
769. When you got to the top of the dip what did you do? There were a few more there—three or four of the men and boys—and they all appeared to have lost themselves. I sang out to them and told them the road to get into the fresh air. We were all in the dark, and they got up through the door. The engineman was there, and I asked him if he could go through and bring the safety lamps from the engine. He said he would try, and he went and brought out the lamps. We lit the lamps and went down the intake to the dip level to try and rescue the unfortunates that were in it.
770. None of them were able to come up the dip by themselves? No, when I was coming up the dip Houston was still singing out to me that "John was burnt." I heard Griggs say, "It is no use calling for him; he is done for. He is worse than we are." I said, "No, I am all right. If any of you are fit to come, come up the dip as quick as you can." I could not get any sensible answer from them. When I got to the door I sang out to them and said, "Come boys, if you are fit, come out, come up the dip; I have got the door open." I could get no proper answer from them. All this time I had lost Andrew Anderson, and I put a little stone in the door to keep it open. I called for Anderson two or three times, and at last he answered me. I said, "Come on, Andrew, let us go on as quick as we can." We then went straight up the dip.
771. *By Mr. Rankin:* Were the men in there all this time? The four of them were. Gambie ran straight up. He ran up the dip before any of us. I never saw him until I saw him in a railway carriage going away.
772. *By Mr. Glassey:* You were all in the dark? Yes.
773. *By Mr. Rankin:* And you would be frightened to light the lamp for fear the gas was still there? Of course we could not light the lamps until we got to where the air was. Another thing, owing to Anderson falling down so quickly, he lost the lamp. The handle broke and the lamp was no good. We had to put a new gauze in it before it was any use. It was a Davy lamp.
774. *By Mr. Glassey:* Was the Davy lamp knocked about by the force of the explosion? No; it was caused by the push I gave Anderson. He was standing up and I was in the road at the time. I gave him a push and he rolled down.
775. *By the Chairman:* It was all right before that? He brought the lamp up with him, but owing to his coming up on his hands and knees the gauze was all mucky and dirty, and there was no handle on it.
776. *By Mr. Fryar:* Was the gauze broken? No, it was only dirty
777. *By Mr. Glassey:* Do you think the force of the boy's fall would be sufficient to break the handle and injure the gauze? The gauze was not injured, it was dirty. The handle of the lamp, it had been remarked two or three mornings before, was very thin and almost worn through.
778. *By the Chairman:* Then you with the others went to the rescue of these men? Yes.
779. Who went with you? D'Arcy, the engine-driver, Tommy Bowen, the horsedriver, and two miners—Lewis and List.
780. Did you have any difficulty in getting in to them? No; there was nothing to stop us only the fumes and foul air.
781. Was there much foul air? There was a bit. I never went the first time. We only had two lamps, and I waited at the door to show them the light. They got out John Houston first, and after they brought him out they went back, and it was not long before they came out with Johnstone. They then went down and brought up Alexander Houston, and when they came the next time they were knocked up and overpowered. Allen and I then went down and found Griggs. I said, "Fred, how are you?" He said, "Jack, are you come?" I said, "Are you fit to rally up a bit, Fred, and we will take you up to the fresh air?" He said, "I don't think I am fit, Jack; I am done for." I asked Allen to take one arm, and I would take the other, but I think Allen's heart failed him when he saw how Griggs was burnt, and he said, "I am not fit for it." I said, "Go up and tell D'Arcy to come." He went up, and D'Arcy came down, Allen going with the light in front. We carried him out to the fresh air.
782. How long after the accident was it that you got Griggs? It must have been half-an-hour.
783. And he had been in the foul air all the time? All the time.
784. Have you any knowledge who it was that actually fired the gas? Johnstone told me himself it was Jack Houston.
785. He was the highest up? Yes, he was highest up.
786. Were any of the men in the level above injured? A boy called Irons got a little bit burnt. He was wheeling.
787. Have you formed any idea where that gas came from? No; it was a mystery to me how it came so suddenly.
788. Suppose there was an extra fall in the roof at the 100-yards level, would that be likely to cause the explosion? I do not think so. We had never seen any gas come off that. No gas has been seen there before, and none has been found since.

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789. Then you cannot throw any light on the question as to where this gas suddenly appeared from? No.
790. With reference to the fan, on what day did it finally stop running? I could not be positive. I think about a week after the explosion it was stopped.
791. And when did you start taking it down? I do not know; I had nothing to do with it.
792. When you went down the mine on the 4th April with these four miners, did you meet with much gas? I only went as far as the door in the dip with them. The second time I went with them.
793. Did you on the second occasion see any gas? No.
794. When was the second occasion that you visited the mine? That same day. In the morning, before dinner, they went down, and they went down again at about 3 o'clock.
795. And there was no gas at all? Not the second time.
796. Then it would not be true that they could not examine the workings on account of the amount of gas? Not the second time. They could not see any gas while I was there.
797. Do you know of any meeting of miners taking place on the morning of the 21st to discuss the question of the safety of going down the mine? No; I never heard of such a thing.
798. You have no knowledge of it at all? None.
799. Did you receive any instructions from the manager on the Monday before the accident to remove the men from the dip workings? No; I did not receive instructions to remove them from the dip workings. I got instructions on Monday morning to stop the men who were working in the return going down to the dip.
800. But no instructions to remove the men at once from the dip? No.
801. *By Mr. Glassey:* What was the object in removing the men from that particular part? On Monday, the 19th, the air was getting pretty well charged with gas through this fall. That was the reason.
802. Coming from that particular fall? The fall at the bottom of the dip.
803. And it was considered an act of prudence to remove the men from there? Yes.
804. How many men were there? Twelve, men and boys.
805. So that on the Monday you apprehended danger arising from gas that had accumulated there? That had accumulated at the bottom of the dip.
806. *By the Chairman:* Would it be possible for that gas that was given off from the dip to have come through to where the men were removed? No; impossible.
807. Would the gas meet the return current first? Yes. Air will never go out of the return with the intake. The men were working in the intake, and the gas was in the return.
808. *By Mr. Fryar:* Where you saw that new fall on the 21st of March, between the first and second rooms in the 100-yards level, had there been any fall before? Yes.
809. Between the first and second rooms? No, there was no fall there, but there was one in the same level.
810. You told us before that the previous fall had broken itself off at the second pillar? Yes.
811. And that when you went in with the men there was a fresh fall which had come out to the first room? Yes.
812. Was there any fall between that first room and the second room where it had previously broken itself off, or was there any fall between the second room where it had previously broken off, and the first room? No.
813. How far off from that fall were the men who were working in that particular level? Twenty or 30 yards.
814. Is that near the end of the level? Next the dip level.
815. Since the fall was broken off at the pillar, the pillar has been taken out, and the new fall has occurred where the pillar stood? Yes.
816. From the dip end of that fall it was about 20 yards to where the nine men were working in the top level? Yes.
817. *By Mr. Glassey:* What is the distance from the 100-yards level down to the bottom of the dip? Another 100 yards.
818. Have the pillars been taken out there? At the bottom of the dip?
819. Right from the 100-yards level to the bottom of the dip? Yes.
820. Have falls taken place there? No; only at the first level at the bottom.
821. How frequently did you visit from the 100-yards level downwards right to the bottom of the dip? Every morning.
822. Was there any water accumulating there? Yes.
823. Was the water gradually rising day by day? I never could see the water after the fall.
824. After which fall? The fall in the bottom of the dip.
825. What distance were you down the day the accident occurred? It might be 160 yards.
826. We found water there—was that merely a trough? The water never got any higher than that; it never filled up any further than that.
827. Then from that fall right down to the bottom of the dip it was filled with water? Yes.
828. That is 100 yards of water? No.
829. Then there were 40 yards of water there? Yes.
830. Before the accident occurred? I never could see the water before the accident occurred.
831. No water at all? I could not get down far enough to see it.
832. But you could have seen it if you had got down far enough? I suppose so.
833. Would not the water accumulate from time to time at the bottom of the dip unless it was taken out? Yes.
834. Was the water taken out? Never since we took the pillars out.
835. How long ago was that? We started after the new year.
836. So that you had got the pillars out right from the bottom of the dip up to where the accident occurred? Yes.
837. Then 40 yards of pillars had been taken out? More than that, I think.
838. What distance then? The dip was 100 yards from the top level to the bottom, so that it must have been 60 or 80 yards.
839. What distance was the bottom of the dip from where we were on the day of our visit? You got to where the water was?

840. Yes? It would be about 40 yards.
841. Was the roof standing from where we were right down to the bottom of the dip? No, it was not standing.
842. You haven't any idea of the thickness of the falls there? No.
843. Supposing those falls occurred some time ago, and the crevices or cavities of the falls were charged with gas, would not the movement of the water force that gas further up in the dip day by day? Yes, it would force it up.
844. Did you notice the water rising much during the last few days before the accident occurred? No.
845. Just a gradual rise? Just the same as usual.
846. To the left of the dip you pretty well strip a fault down? Yes.
847. What is the distance from the main road to the fault? There is no main road there at all.
848. The fault gradually came round, like a semi-circle or boomerang? Yes.
849. When you were working the bottom of the dip did you notice gas frequently? Occasionally there was some.
850. What do you mean by "occasionally"—once every day or once every week? No.
851. Is it usual to find a larger body of gas close to where faults are than in places where there is a considerable area of whole coal? It has been in this mine.
852. Then your heaviest body of gas would be where your fault was? Yes.
853. Did you notice the falls which had taken place from time to time at the bottom of the dip? Yes.
854. How many were there? Three altogether, I think.
855. Those three falls would cover an area of 40 yards? Of course the dip never fell.
856. No, I suppose you would leave a rib of coal on each side of the dip? Yes.
857. But you took away the pillars on each side? On one side; on the other side there were none to take away.
858. From the place we visited, for a distance of 40 yards, there would be some pillars to the left, wouldn't there? Yes; but that had never been worked
859. You never took the pillars out there? No; not down that section.
860. You took away the pillars to the right of the dip in that 40 yards? Yes.
861. How many falls took place over that area of 40 yards? About four.
862. The first fall would be at the bottom of the dip? No, inside; there were four places fell in.
863. What would be the area in each place—14 yards? No, 7 yards in each place.
864. How many falls took place in the area where those four places fell in? It all came away in one night.
865. That was a tremendously large fall, covering an area of 60 or 80 yards, and you say that all came away in one night?—Was there a likelihood of gas accumulating in that large cavity? Yes, if there was any there.
866. You have already told us that you noticed gas there from time to time? Yes.
867. Would'nt you naturally expect to find gas when taking the pillars away? Yes.
868. Isn't there a strong likelihood of a large quantity of gas accumulating in that large crevice created by the falls where four places fell in? I do not know that it was a large cavity, or what you would call it, but of course the gas would collect there.
869. What is the width of your rooms? Seven yards.
870. And what is the size of the pillars? Fourteen yards.
871. So that those four falls would cover an area of 60 or 70 yards altogether. Wouldn't that be a large cavity? Yes, it would.
872. Would that not hold a tremendous quantity of gas? Yes.
873. The water gradually rising and further falls taking place further up the dip? There were never any further falls up the dip.
874. But the water gradually rising would force the gas further up? No.
875. Then the water would extinguish the gas? No.
876. What would become of the gas? The gas would go up the return.
877. Then where did this gas come from that did not go into the return, and which exploded and burnt the men? I cannot account for it.
878. There is no probability of it coming from the quarter that I speak of? Impossible.
879. Why not? It had too far to go up against the air.
880. But you have already told us that the air got slack and the men had to be removed. Was there not a likelihood of the air becoming slack on this occasion? It was not slack on that occasion, for I was there a quarter of an hour before the accident occurred, and the air was as strong then as it ever was.
881. Then there is no likelihood of the gas which exploded accumulating in the cavities? No.
882. Do you examine the mine yourself every morning? Yes.
883. Every place? Every place.
884. Were you the fireman? Yes.
885. I understood you to say that you had no fireman? No; that is not so.
886. Since you became overman have you acted in the double capacity of overman and fireman? Yes.
887. Is that usual? I think so. In some places it is.
888. At any rate it is the custom here? Yes.
889. You have always done it? Yes.
890. Before you became overman, eleven months ago, you were then roadsman. Did you examine the places then? Yes.
891. Had you more men at that time? Yes.
892. Is that the reason you did not act as fireman as well? No; the overman who was there before me left and I got his job.
893. And then, when you became overman and got to the higher position, you examined the places yourself every morning? Yes.
894. And prior to that, when you were roadsman and fireman, you examined the places then? Yes, in my section.
895. Who examined the places in the other sections? The other roadsmen.
896. How many sections had you in the mine? At one time we had three.

J. Caldwell. 897. How long ago is that? Seven or eight years ago.
898. So that at one time you had three men examining the sections in the morning? I do not know
26 Apr., 1900. that it was in the morning. The roadsman is supposed to examine his section every day.
899. But more particularly in the morning? Yes.
900. So that since you become overman you have done that work yourself, as fireman? Yes.
901. You examined this fall near the seat of the accident on the morning of the 21st March? Yes.
902. Was that fall the same size as it was the previous morning? It was, at the top end.
903. Was it larger at the bottom end? We never examined it next morning at the bottom end.
904. Was the fall the same size on the 21st as on the 20th? Yes.
905. What was the hour at which you examined that fall? About 6 o'clock in the morning.
906. And you did not examine the fall on the same day? I never went on top of it; I went past it.
907. Were you close to that fall or round it, or near it afterwards, that day? Yes; once I went past it.
908. Were you close to it? Yes, close to it.
909. Do you think there is a probability of additions to that fall having been made between the time you examined the place and the time you came back past it again? No. It had not happened before dinner, because I had been past it before dinner.
910. Could you see it in passing, or had you to pay particular attention to it? I could see it on my travelling way, which I used to take as a short cut.
911. From the time you examined the mine and came back what time elapsed? Three-quarters of an hour.
912. Were you only absent out of the mine that forenoon three-quarters of an hour? I do not think I was out of the mine more than ten minutes.
913. You could go from where you were to the top, enter a report, and come back again in ten minutes? In about three-quarters of an hour I would be back at the top.
914. You were not absent again until the accident occurred? I was down the mine all that day.
915. If an addition had been made to that fall between your examination and the time of the accident taking place would you have heard of it? No, I would not have heard it.
916. Is there any possibility of that having taken place? There is a possibility.
917. Do you think it took place? I do not think it took place before the accident.
918. Supposing you were on your oath would you affirm decidedly that an extra fall did not take place? No, I could not.
919. Was the boy who worked with you away frequently during the forenoon? He was never out of the dip.
920. Was he with you all the time? He was sometimes by himself.
921. Did that boy hear any fall or report any noise of a fall having taken place between the examination in the morning and the accident occurring? No.
922. The accident took place about 1 o'clock? Just about 1 o'clock.
923. So that you would not absolutely say that an addition to that fall did not take place during the interval I have mentioned? No.
924. Now, when you examined that cavity you found no gas? No.
925. Have you noticed gas accumulate pretty rapidly in that mine? I have seen it come from the fall at the bottom.
926. Was there better ventilation at the top than the bottom of the fall? About the same.
927. You saw gas frequently at the fall at the bottom of the dip? Yes.
928. Was that gas rather erratic in its movements—some days stronger and some days weaker? No, I cannot say that it was. It was about the same always.
929. What time did you see the gas at the bottom of the dip prior to the accident occurring? I saw a little gas that morning.
930. At that same fall at the bottom of the dip? Yes.
931. The morning of the 21st? Yes.
932. Did you take any special care to clean that gas out? No, it did not require it. It was right in the return, and nobody was working in the return.
933. But other parts outside the return;—could the air reach there? Yes, I used to follow the air round and see that it was all clear.
934. Did you test outside the return? I used to follow the air all round.
935. Did you find gas outside of the return? No.
936. The only gas you found was in the return? Yes, coming from the fall.
937. Do you think that all the gas that was lurking in that cavity was cleaned out and made its way into the return airway? I cannot say for that. If it did not make its way into the return airway it had to stop where it was.
938. If a fall had come away where that gas was located is it likely that the gas would come out where the men were working? No, not where the men were working. It would go out.
939. So that on the morning of the 21st of March you discovered gas in the return airway. Was there a considerable quantity of it? No; just a little coming from the fall.
940. Did it never strike you that there was a considerable quantity lying about the fall which might make its way out? Yes; I used to reckon that if there was a fall to come by the old fall it would drive it out, and that was mostly the reason for taking the men out of the return.
941. So that there was sufficient gas there to cause you and Mr. Sharp to apprehend danger on Monday and to remove the men? Yes, to remove the men out of the return.
942. Where did they go to work after that? Some went up to the first road; Houston went just opposite one of the pillars.
943. Then Houston was one of the men who were removed on the Monday, and he went into a place higher up the dip? Yes; he went into the dip level on the opposite side.
944. Did those men ever complain of a dread of danger prior to that Monday, or on the Monday itself when they were removed? No.
945. You say you have had some experience of gas in coal mines in Scotland? Well, not much.
946. Chiefly in Ayrshire? Yes.

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947. Were you ever out of Ayrshire working? No.
948. What age were you when you left Scotland? I was nineteen when I landed here.
949. Were you howking or hewing coal before that? Yes.
950. So you have not had much experience of gas? No.
951. When taking your present position were you put under any practical test as to your knowledge of gas before you assumed your present position? Yes; Mr. Sharp thought I was qualified for the position.
952. What was the examination? Well, he had seen me doing the work.
953. He saw you hewing coal? He saw me examining the place for gas.
954. When you were fireman? Yes.
955. How long were you at that? Twelve months altogether.
956. How long were you roadsman? I have been about twelve and a-half years roadsman in the Torbanlea Colliery.
957. In giving your evidence before the warden lately you said you had seen gas very frequently? I do not remember that I said that.
958. You say you have seen evidence of gas, but not enough to frighten you from working with a naked light? Yes.
959. Was there enough, do you think, to frighten those men whom you removed? I never heard any of them say they were frightened.
960. Had you any explosion of gas while working round the bottom of the dip? No.
961. Not at all? No.
962. Nor in taking out the pillars on leaving the bottom of the dip? None, except this one on the 21st of March. Of course shots have been fired, and if I remember rightly I have heard that once or twice gas has been lit.
963. You did not use shots taking out the pillars, did you? Not much, I think. I believe they did at the start.
964. Having observed quantities of gas sufficient to cause you to remove a number of men, did it ever strike you that it was advisable to adopt safety lamps in taking out the pillars? No. From the quantity of air there was there I thought it was impossible for gas to come in from where it was accumulating to where the men were working in the intake.
965. Then you don't think gas was accumulating with sufficient rapidity to cause an explosion where the men were working with naked lights? No.
966. Do you think the gas had lurked in those crevices or cavities from time to time? I daresay it might have done.
967. Then the gas accumulating there, and the fall taking place, would not you apprehend danger from that source? No, not in the way the mine was worked.
968. You yourself had a safety lamp that day? Yes.
969. You thought it desirable to have a safety lamp when moving about from place to place? No, not at all; I only had a safety lamp when I was away in the old workings.
970. And when you were not there you worked with a naked light? Yes.
971. Did you think it desirable that those men who were working with naked lights should be supplied with safety lamps for their protection? No, I did not.
972. You did not think so? No.
973. When the accident occurred you say you told the boy to lie down, and assisted him to get down, as they had lit the gas? Yes.
974. Why were you able to tell the boy that they had lit the gas, when, as you say, there was no gas there? Because I heard one of the men telling the boy Houston not to get burnt, and I heard Houston saying that his boy was burnt; and he could not be burnt with anything else but gas.
975. It seems strange that you could tell your boy they had lit the gas, and yet have told us that there was no gas there. How could they light that which was not there? I do not know.
976. There was no gas there twenty minutes previous, according to your statement, and yet when the accident took place you were able to tell the boy that they had lit the gas. What gas did they light, according to your then knowledge? No gas that I knew anything about.
977. Then how were you able to come to the conclusion that they had lit the gas? I heard Alexander Houston saying his boy was burnt.
978. And though, as you say, you knew twenty minutes before that there was no gas, yet you were able to tell the boy they had lit the gas? Yes.
979. How do you explain that? Well, I saw the flare-up, and I knew it was not water.
980. It occurs to me that there was gas there, and that you knew it to be there, and that you were able to say momentarily that they had lit the gas? If I had known that there was gas there, the men would not have been there, but there was no gas there a quarter of an hour before to my knowledge.
981. You are not able to elucidate that point any clearer? No.
982. How long did you hear the rush of air before the explosion took place? Not a second.
983. As soon as you heard the rush of air you, of course, concluded that there was an accident? As soon as I felt the rush of air I saw the flame.
984. And, of course, it occurred to you that something was wrong? Yes.
985. I think you said that from where you were at the time you saw the flame you knew that it came from the Houstons? No, I said I heard Alexander Houston telling John Houston to put it out, and from that I formed the idea that John Houston had lit the gas.
986. I think you have given it as your opinion that the gas might have come from the floor. Have you frequently seen gas coming from the floor? Yes; I have seen blowers, as we used to call them.
987. But no explosion? I have seen some pretty strong ones.
988. Was that in the old workings? Yes, in the old workings.
989. Have you ever seen much from the time when you were taking out the pillars? No, I do not think I have.
990. In your opinion, considering the pressure that would be on the floor, a considerable quantity of gas would come from that small seam, covered as it was with only a porous fireclay? I do not think it would be impossible.

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991. Is it probable that a sufficient quantity of gas would come from that source to cause the explosion that took place? I could not say.
992. During your observations in that mine, and judging by the pressure that took place from time to time, have you ever seen anything approaching an outburst of gas from that source which would be likely to cause such an explosion? No.
993. Do you think that explosion was caused by that means? I do not know.
994. You have had accidents in the mine from time to time, especially in 1896. What appliances had you at the pit to receive any men who might be injured in the mine—appliances such as blankets and stretchers? When these men were brought up the engine-driver had some oil to put on them and we wrapped them up in blankets. First aid was rendered.
995. Have appliances been provided by the pit to meet such emergencies? I believe oil was at the pit, but the blankets came from the people round about.
996. Were the blankets brought down to the mine or were the men taken up naked? I do not know how four of them got up. They were up before I got to the pit bottom, but in the case of Griggs we got some blankets down into the pit and wrapped him up.
997. Have you any opinion as to whether the men suffered in consequence of the want of these appliances and comforts? The men, before they left the top of the dip, were covered up as much as possible. Other men put their clothing on them.
998. In the case of Griggs, he was not severely burnt? He was the most severely burnt. I think you mean Gambie.
999. Yes, Gambie, of course. I was wondering if these comforts had been brought into requisition earlier whether some of those men might not have been saved? I cannot say.
1000 What was the length of time from reaching the top until the men were in the train on the road to Maryborough? I do not think Griggs was half-an-hour. We made a mistake about the special train. The special train went to the pit and we went down to the station instead of going with it. The train went straight away to Maryborough when we got the men in.
1001. *By Mr. Rankin:* You were provided with a safety lamp yourself, and you carried it with you always during the day? No; I only took it when I went to examine the old working places.
1002. The purpose of taking the lamp was to examine the outside workings—the waste—in case gas had accumulated? Yes.
1003. But you do not consider the gas was in such quantities as made it desirable that the men should always work with safety lamps? No.
1004. You thought it quite safe to work with naked lights? Yes.
1005. You said that you shouted out that the gas was alight. According to your statement you saw the gas about as quickly as you said that. Did you shout out that the gas was lit before you saw it or when you saw it? When I saw it.
1006. Had you had any experience of explosions before this? I was in one explosion in the old country.
1007. In Lugar? In No. 11 Corman.
1008. Was that in a coal-mine? Yes.
1009. Was it a large explosion—were many injured? I was only a boy at the time. Two of us were pushing in a wagon of bricks to the bricklayers and we were about 30 yards away from the face when we met the explosion.
1010. Have you heard of any other explosions while you were there? Nothing of any consequence.
1011. Do you remember one in the Maid pit? No; I have worked in the Little Maid.
1012. You never worked in ironstone? No; not there.
1013. The gas there was very similar to what it was here, and it was not considered very dangerous. You never knew of any big explosion? No.
1014. Or of any great quantity of gas being in the mine at one time? No. I remember a roadsman getting burnt. The fall came on the main road, and he went straight away up to the top of the fall and was severely burnt. The man's name was Scott. The explosion I was in in the old country was a bigger one than the one at Torbanlea. It knocked down all the brickwork that the men had been building up that morning.
1015. *By Mr. Fryar:* I want you to tell us as nearly as you can where you were at the time. Was it in the level opposite to where the Houstons were working? Yes; I was in the level opposite. Of course that level did not go in any distance. I was in the return opposite to where Houston and the others were working.
1016. *By Mr. Glassey:* Rather below them? I was lower than Houston, but I was not lower than Gambie and Johnstone.
1017. But you were lower down than where the gas was lighted? Yes.
1018. *By Mr. Fryar:* If you had had a suspicion that there was gas in the neighbourhood of where the men were working with naked lights, would you have been there yourself? Certainly not; and I would have stopped them working there if I had thought there was gas about—I would have made them put out their naked lights.
1019. In the case of the Houstons, would the two men be close against the face, or would they move about stacking the coals on the road side? They would move about.
1020. And what distance would they be from the face at any time? Three or 4 yards away sometimes.
1021. *By Mr. Rankin:* You mean 4 yards in from the dip? Yes; or 4 yards down.
1022. As far as the pillar went back they would have to go? Yes.
1023. *By Mr. Fryar:* Have you seen that place where there is a burst-up in the floor? Yes.
1024. Do you know the nature of the little seam of coal that lies below? Yes.
1025. Is it laminated—that is, little partings in it—or is it what we call homogeneous in its structure? It is pretty even.
1026. Is it a coal through which water or gas would likely pass for 100 yards? I could not say.
1027. *By Mr. Glassey:* What sort of ground had you at the bottom of the dip? Very strong.
1028. Even round about the fault? Yes; on the left-hand side of the fault it was a bit lighter, but on the other side we had a very good roof.
1029. And round about the fault, was that strong ground? Yes; strong ground.
1030. Is it usual to find strong ground around faults? No.

1031. *By Mr. Rankin:* The coal got bad and burnt on coming up into the fault? Yes. Of course, they stripped it right down to the fault.
1032. *By Mr. Glassey:* Speaking of the fall which has been so often mentioned here, you say it would be about 14 yards? That was in the 100-yards level.
1033. Was that equally as thick, or comparatively level with the top of the previous fall? About the same.
1034. It came away from the same parting? Yes.
1035. Was that 14 yards in length or in breadth? Fourteen yards in width along the level.
1036. Do you think there is a possibility, or a probability, that that 14 yards of additional fall forced out the gas which had accumulated in the other cavity? We could never find any located in that fall; Mr. Sharp and myself were very particular in examining that fall for gas, and could never discover any there.
1037. Have you any record of the state of the barometer at that period? No.
1038. Whether there was a fall in the barometer that day? No.
1039. Had you a barometer? No, I never got one.
1040. You do not keep one at the pit? Yes, there is one there, I think.
1041. Where do you keep that? I have seen Mr. Sharp with it down below.
1042. So that you are not able to say whether there was any fall in the barometer on the 21st March? No.
1043. Have you any record of the ventilation in the mine that day as compared with the previous day?—Do you keep a record of the ventilation? No.
1044. Just merely test it, I suppose? Just merely test it.
1045. *By Mr. Fryar:* Referring to the left-hand side down the dip, does the fault go round, or is it the coal thinning out and the bands thickening on that side? Going up at the 100-yards level the coal gets thinner.
1046. Do you know how far the fault followed you round?—You say you followed the fault in about 30 yards? No, not so far as that.
1047. Twenty yards, then? No.
1048. What is the distance, then? Fifteen or 20 yards.
1049. And up from that the coal was left because it was inferior coal, or because it was getting thinner? Yes, it was inferior coal.
1050. *By Mr. Glassey:* Were you fireman when the accident occurred in 1896? No.
1051. What were you doing then—hewing coal? I was roadsman.
1052. You had nothing to do with the examination, then? No, it was not in my section.
1053. Who was the roadsman and fireman on the section where the accident occurred at that time? Keene.
1054. Was Ritchie burnt in Keene's section? Yes.
1055. And Keene was burnt himself in that section? Yes.
1056. *By the Chairman:* In the evidence you gave at the recent inquiry you produced a plan, and pointed out the place where you were working, which was marked "J.C."? Yes.
1057. Here is the plan which was put in as an exhibit [*plan shown to witness*] at the inquiry into the accident, and "J.C." is marked in a level 25 yards below where the Houstons were? Yes; that is correct.
1058. *By Mr. Glassey:* What about that book that you kept at the mine with the proceedings of the day recorded?—Have you got that book? Yes. [*Daily Report Book produced.*]
1059. *By the Chairman:* What is the entry on the 21st March? "I, the undersigned, certify to having examined the working places before any men were below, and find them in a safe condition. No gas to be seen in any of the working places."
1060. And what is the entry on the 20th? "I, the undersigned, certify to having examined all working places before any men were below, and find them in a safe condition. No gas to be seen in any of the working places."
1061. And on the 19th of March? "I, the undersigned, certify to having examined all working places before any men were below, and found a stopping had fallen out, which caused the air to escape so that the old workings filled with gas. I stopped all places working in the return, as the air was charged with gas. All the other places were free from gas and in a safe condition."
1062. Is that your own book? Yes, Mr. Sharp has a report book of his own.
1063. What is the earliest entry in that book? 17th August, 1899.
1064. I see every now and again you add the words, "I have also been through the different airways, and find them in good condition"? Yes.
1065. How often did you do that? About once a week.
1066. On 7th February, 1900, you say: "I, the undersigned, certify to having examined all working places before the men were below, and found them in a safe condition. In Lewis's old place I found some gas, and drove it out by turning the air on it. All other places were free from gas." Where was Lewis working? Right away down at the bottom of the dip.
1067. *By Mr. Fryar:* On the right-hand side? Yes.
1068. *By the Chairman:* On the 3rd February you say: "I found a creep in three places where they were taking out the pillars. All other places were in good condition"? Yes.
1069. *By Mr. Glassey:* Where was that creep? In the bottom level.
1070. *By Mr. Fryar:* Is that near Lewis's room? Yes.
1071. *By the Chairman:* The next mention of gas, going back in point of time, is 17th January? Yes.
1072. You say there, "In Gambie's level where the gas was so strong the last two days we have abandoned it"? Yes.
1073. *By Mr. Rankin:* Where is Gambie's level? On the right-hand side of the dip, at the bottom of the dip.
1074. *By the Chairman:* Then on 18th December, 1899, you report, "In Gambie's place I found a small quantity of gas"? Yes.
1075. On the 23rd of November, you say, "In Irons's place I found a little gas; all other places were free of gas"? Yes.
1076. *By Mr. Glassey:* Where was Irons's place? On the left-hand side of the dip, near the bottom.

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1077. Where you have a small bit of coal? Yes.
1078. *By Mr. Rankin:* He was driving into the fault, I expect? Yes, I believe he was.
1079. *By the Chairman:* On the 20th of November you report, "I found a little gas in Irons's place"? Yes.
1080. And on the 2nd of November you say, "In Brown's place, off the bottom level, I found a little gas"? Yes.
1081. *By Mr. Glassey:* Is that at the opposite side of the dip? No; he was in a place off the bottom level going to the rise off Gambie's level.
1082. *By the Chairman:* On the 1st of November you report, "I found a little gas in Brown's place where they are taking out the pillars"? Yes.
1083. *By Mr. Glassey:* What do you do to take that gas out? We generally have a look to see what is the cause of it.
1084. And if it is in small quantities you sweep it out? Yes.
1085. If you have a reasonable quantity, what do you do? We put up a brattice.
1086. How near do you take that to the face? Sometimes we have it up close against the face—within a yard.
1087. *By the Chairman:* On 9th October you report, "I found some gas in an old place that has stopped working, and put up a brattice and drove it out"? Yes.
1088. On 19th September you report, "I found a little gas in Coley's place through the gob being too far back—I put a brattice, which put the air nearer the face"? Yes.
1089. On 9th September you report, "In Coley's place I found a little gas through the gob being too far back"? Yes.
1090. Those are the only places in which gas is mentioned in that book, which goes back to August, 1899? Yes.

JOHN MCKINNON, Certificated Mining Manager, examined:

J. McKinnon. 26 Apr., 1900.

1091. *By the Chairman:* You were one of the bench of miners who sat with the warden at the statutory inquiry into the late Torbanlea accident? Yes.
1092. Do you know how the bench of miners was chosen, or by whom? No, I do not.
1093. You are a practical miner? Yes.
1094. Where have you gained your experience? In South Wales and in the northern districts of New South Wales.
1095. How long have you been engaged in mining in these districts? About twenty-three or twenty-four years.
1096. And where are you working now? At the Howard Colliery.
1097. In what capacity? As a miner.
1098. How long have you been there? About seven months.
1099. Were you working in any of the New South Wales collieries where there was much gas? Yes.
1100. Which collieries were they? The Old Bulli, both before and after the explosion.
1101. *By Mr. Glassey:* Are you speaking of the explosion of 1887? Yes; fourteen years ago last March.
1102. *By the Chairman:* Then you have had very considerable experience in mines which contain gas? Yes.
1103. Were you in any other mines in New South Wales where gas was prevalent? Yes; the North Bulli or Austimere used to give off a little; also a little in the South Bulli, and a little in the Bellambi colliery.
1104. After hearing the evidence which was tendered at the other inquiry, did you, in company with the other miners who formed the bench, visit the Torbanlea colliery? Yes.
1105. And you examined the workings? Yes.
1106. You went to the exact spot where the accident took place? Yes.
1107. That examination took place on the 4th April? On the 4th April.
1108. Do you happen to know whether the fan was at work on the day you went down? No, the fan was not at work.
1109. Did you visit other parts of the dip workings? No; we went no further than where the explosion took place.
1110. Will you kindly inform the Commission in what state you found the workings, making reference to the occurrence of gas and to anything else that you might have noticed that would bear at all upon this accident? Well, I will tell you all I saw. It was between 11 and 12 o'clock when we went in. We had a Davy lamp with us, and we approached into the dip off the main level. There is a door there. The wind was cut off, as we were informed. As we opened the door I had the lamp, and there were signs of gas.
1111. *By Mr. Glassey:* Immediately behind the door? Just what had gathered behind the door; not a great quantity, but it was there. We approached with one light, and there were five of us, down to where these men were working. I examined the place very carefully and thoroughly. I found there were no cracks or upheavals in the floor, and no cracks in the roof, and no bore holes in the coal which might have produced or held gas. In fact, the place all round about where anything could be held was all open, and no accumulation of gas could possibly have been there. I could see none. We came up again, and came down here where you are now sitting. Of course, I was not satisfied. We had seen nothing, and I told the manager that I was not satisfied. We went back again to the mine in the afternoon. The reason for that was that we wanted to connect the place where the nine men were working with the place where the five men were working. That was the intake, and the air had to travel round those men. I went into where the nine men were working. I went up into the rise. I examined that, and found no sign of gas in the afternoon. Previous to this I got Mr. Sharp to erect a door on the main level so as to converge all the wind that could possibly be converged on to that place. When I went in the afternoon everything was perfectly clear. We went into where the nine men were working, and examined the place all round. I could see that the place had been freshly worked, because I found a new lamp wick on the top of a prop, and also a pick that the overman identified as belonging to one of

the victims. I went in where the nine men were working, in through a bit of a cut through. It passed through some pillars. That was their intake for conducting the air through to the other five men. Of course, it was squeezed up a little, and I could not find the entrance through. I turned to the overman, and said, "Is this not the way you travel; is this not the air way?" I said, "Dear me, there is a great fall here." Of course both the manager and overman were nonplussed. They were not aware of it. They had not seen the fall until that day. We went to where the five victims were working, and came in to try and connect with the bottom side. I do not know what distance the fall might be. I did not go right on top of the fall, but I tried the lamp, and she showed no signs whatever of any accumulation of gas there. That was all the examination that we conducted. I was satisfied in my own mind.

1112. *By the Chairman:* Then you came to a conclusion as to where the gas came from? Yes.

1113. And what was your conclusion? I came to a conclusion in reference to the gas, but I did not know where it came from.

1114. And what was your conclusion? That it was the fall that had liberated the gas. As I was informed, previous to this large fall a small fall had taken place, which they used to travel over, but which was never examined. There were cavities there. Maybe the old rooms had been worked back, but there was nothing to drive or force the air up into that space.

1115. When you spoke of having a door put up to send the air through the workings above the upper level to clear out the gas in the afternoon, had you any reason for thinking that gas was there before that was done? No, it was just a precaution. The event of the victims being burnt was enough to caution me. It was a case of self-preservation.

1116. *By Mr. Glassey:* On examining the mine in the first instance you found the air contaminated when you opened the door across the dip? Yes.

1117. And through there you discovered gas? Yes, just against the door.

1118. Then you did not discover the fall which you have described during your first visit? No.

1119. Did you say you discovered that there had been some working going on from the time of the accident to your visit? No; I was satisfied in my own mind that that was the working place where these men were employed at the time.

1120. You can say that it was not an old place—that it had been recently worked? Yes.

1121. There had been no work done so far as your judgment goes from the time of the accident to your visit? None whatever.

1122. There was no preparation made on the part of anybody for your visit? None whatever.

1123. Can you point out on the plan where you discovered the fall which in your judgment forced the gas out of somewhere? Yes, I think I can.

1124. You say the manager and overman were rather astonished to hear of that fall? Yes.

1125. Their general demeanour indicated that? Yes.

1126. You took them to where you found the fall? Yes.

1127. Did they say to you that they had never previously seen that fall? Yes.

1128. Is it a large fall? Yes, it is a large fall.

1129. Did they show you the fall the manager and overman examined from time to time? Yes.

1130. What is the distance between the fall they had been accustomed to examine, and the fall you discovered? Well, they are pretty well connected now.

1131. You think the fall you saw had fallen subsequent to the one referred to by the manager and overman, which they say they examined from time to time? Yes.

1132. And in your judgment that fall forced the gas out of some cavities in the roof, and so caused the accident? It may have been standing back in an old room.

1133. It may not have been in the cavity at all? That fall, I say, liberated or pressed out the gas.

1134. Were those old workings sufficiently open for a man to examine them day by day? Yes.

1135. Did you notice the air going into those old workings? There was no current through that level, but on the main level it was travelling 6 or 8 miles an hour.

1136. On that main level, as far as you were able to see in, were there extensive old workings? I am referring to where Houston was; to the extreme right it was all open, so that anybody could traverse it.

1137. You say that so far as your observation went during your two visits, you saw no upheaval in the bottom? No upheaval.

1138. None at all? No. There was a slight crush, but no real upheaval.

1139. What was the distance from the fall you have described to where the Houstons were working? I should say about 20 yards.

1140. *By the Chairman:* In a direct line? No; the line you would travel.

1141. *By Mr. Glassey:* Are you of opinion that the crack or crush in the bottom would liberate sufficient gas to cause an explosion? Not in that instance.

1142. Are you speaking from your own observation, or giving us an opinion of something that is hardly likely to occur? I am giving that as my candid opinion, and as the result of my observation.

1143. Where is that crush you refer to? It is between where the nine men were working up alongside of a little rib and where this fall took place.

1144. Then, you have no doubt in your mind that that fall was the main cause of forcing the gas out of the workings on to the naked lights of the men who were working there? No, I have no doubt whatever.

1145. Do you think it is a prudent thing to work with naked lights alongside of waste where gas has been discovered from time to time, or is it a much more prudent thing to work with safety lamps? It is a much more prudent thing to work with safety lamps if gas has been discovered and is known to be there.

1146. That is in old workings? Yes.

1147. Touching this pavement theory, have you had an experience at all of outbursts of gas from floors? Yes, I have.

1148. Was that from whole floors or coal floors? From whole floors.

1149. Does that refer to broken workings or to whole workings? Chiefly to broken workings.

1150. And gas has been discovered on the floors in broken workings? And in solid workings too.

1151. Have you had any experience where there was a floor a portion of strata somewhat of a solid nature, and a small seam of coal below that? Yes, I have.

1152. Where was that? There was some of it in the Bellambi Colliery.

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1153. From your experience as a practical miner, considering the working of that large area, the taking out of the pillars, and the constant pressure down, do you think that would be sufficient to liberate any quantity of gas that might lodge in that little seam in the floor? From the constant pressure, gas might be discharged out of the floor, but there would not be a sufficient quantity at any time to ignite any lights in close proximity.

1154. And would not cause an explosion? It would, certainly.

1155. But I mean a dangerous explosion? No, not in my opinion, because there would not be sufficient gas come out of the pavement at one time to be combustible. Of course, we require about 1 foot to 7 feet to be combustible; 5 to 12 is about an average, and hardly enough would be generated through pressure to give off that amount.

1156. Then would a small crack liberate enough gas to cause an explosion? No, because all these cracks and upheavals are like a person stealing something—they come so very slowly and unnoticeably. The gas generates so slowly that it is hardly noticeable.

1157. Then are we to conclude that you have formed a distinct and decided opinion that the gas was forced out from somewhere by the concussion of that fall? Yes.

1158. *By Mr. Thomas:* You said you were at Bulli both before the explosion and after? Yes.

1159. Were you working with a naked light or with a Davy lamp? In Old Bulli I was working with a naked light, but I have worked with a safety lamp.

1160. Then, although gas may be known to be in a mine it is not always the custom to use safety lamps? Oh, no.

1161. *By Mr. Glassey:* In taking out the pillars or in working alongside of waste or old workings, is it the custom to work with naked lights? No.

1162. In this instance do you think it was a mistake to work with naked lights? I am not inferring anything, mark you. I have no evidence to show that there was any gas whatever. I only went down the colliery on that day and I am not going to infer anything, but I will answer any question that you may put, straightforwardly.

1163. Do you think it was a proper thing to work alongside that waste, where it is now proved that gas has existed, with naked lights, or would it be wise to abolish that system of working with naked lights? Decidedly.

1164. *By Mr. Fryar:* Were you ever in a house or hotel lighted with gas? Yes.

1165. Can you say about what the size of the gas-burner is—the size of the orifice? Not exactly. I could not positively say.

1166. At any rate, you have seen a match put to a very small orifice and it will light. How is it that that orifice will give off sufficient gas to cause an explosion—because it really is an explosion—yet that hole down below will not give off sufficient gas to cause an explosion? Well, I suppose gas that would burn like that would consist of four parts of hydrogen and two of carbon, by volume—that is, the gas in the house. Of course that is encompassed, and as soon as the match is applied the flame is given out. In the other case the action is slow. It is not nearly so quick as the action from the gas lamp. The match is put to an orifice in the case of the house or street lamp, but the other gas has a larger area to expand over.

1167. But did you not say that the area was too small, and not too large, for a quantity to come out? I will say so now. We were given to understand that the volume of ventilation was about 14,000 cubic feet per minute.

1167A. How much gas generated out of the crack would be sufficient, mixed with the fresh air, to cause an explosion?—How much would be required to be generated from that pavement? I say it would be impossible, in my opinion, for sufficient gas to generate from that pavement at one time, and mixing with a current of air of 14,000 cubic feet per minute, to cause an explosion.

1168. The question is how much it would take to cause an explosion? It is an easy matter to calculate how much it would take. I have already stated that it would take about 1 foot of gas to an average of 7 feet of pure air for it to become an explosive gas.

1169. And is that what the books tell you or is it the result of experiment on your part? I have seen both theoretical and practical works on the subject, and have been with practical men.

1170. And is that what they tell you? Yes, decidedly.

1171. That would be 12½ per cent. of gas before it would become explosive? Yes.

1172. Supposing that gas does not become mixed with air will it explode? No.

1173. Consequently, as soon as it comes out of the hole it is mixed with air? Yes, and ignites as soon as a match is put to it.

1174. How is it that that does not apply in a mine? I have already, as far as I possibly can, given my opinion. My answer may not be the right answer, but it is my answer,—the one is closely confined to a small area, and in the other case the gas has a larger area to get away in.

1175. But you told us it could not cause an explosion because the space was too small, and not too large? In my opinion. I do not say it cannot be done.

1176. But how is it that the gas from the small orifice in the gas-burner will explode and that the gas from this very small aperture that you saw in the mine will not explode? Well, I have given my opinion; it may not be right.

1177. When we get two opinions on the same thing that do not coincide, it is a pity that the value of a man's evidence should be destroyed through want of a little explanation. I do not dispute what you say, but I would not like two opinions on this subject to come from the same man without giving you an opportunity of explaining yourself. You tell us that this gas from the orifice in the gas-burner consists of four parts of hydrogen and two of oxygen. What is the composition of the gas in the mine? Four of hydrogen and one of carbon. Of course, I am not now prepared to undergo examination in reference to the composition of all gases. I would want to brush up my information a bit.

1178. Now, put the matter another way. If there were these small crevices in the floor and gas issued from them it would ascend into the roof, would it not? Yes.

1179. And in the case of ascension, presuming a light was in the vicinity, do you think it would come to the explosive point? In my opinion, there would not be enough in that particular place to generate at one time; it would be mixing with the air.

1180. *By the Chairman:* Couldn't it be found in a hollow under pressure? Not with constant pressure.

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1181. *By Mr. Fryar:* Gas coming off the coal is gas pure and simple—it is not mixed with atmospheric air? No.
1182. By the time it gets to the roof it is not explosive—it is too much charged with air? Yes.
1183. Then it must have passed through all the stages of pure gas and thoroughly diluted gas—that is, from the strongest explosive point through all grades to the non-explosive point? Yes.
1184. Surely, if a light came in contact with that gas it would explode? Yes; but there was no light working there.
1185. *By Mr. Glassey:* What I want to get at is, that the explosion may have been caused by the liberation of gas lurking in those crevices through a fall? I think I can give you a practical opinion: In the event of a fall taking place on the intake, through the pressure of that fall, gas might have been liberated and driven on to young Houston's light. The explosion was not of a great nature, as any practical man can see, because the door on the opposite side is not broken, and the props are only singed a little bit on one side.
1186. *By Mr. Fryar:* The lower men were taking out a little bit of a pillar? Yes; but the intake came from those nine men right down on to Houstons and Gambie.
1187. You say the intake came down to near where those men were working;—don't you think it came down behind the pillar that Gambie and the other two—Griggs and Johnstone—were working at; if not, how was it that Gambie was so little burnt and the other two on the other side so severely burnt? Yes; but hadn't the gas sufficient force to bring it down the dip, too?—It came through, and ran behind that stoop where Gambie was working.
1188. It could come there? I think it could. Where is the plan?
1189. Have you ever known, or read or heard, of a large pressure of gas exhibiting itself in the coal? Only in the Helmsberg mine; and that I only speak of from repute. At Helmsberg, four years ago on the 14th of March last, an enormous pressure of gas killed three men and a horse, and blew out, I suppose, over 100 tons of solid coal.
1190. You know there was pressure to that extent in the coal? Yes, in the Helmsburg mine.
1191. You are a certificated mining manager? Yes.
1192. Holding a New South Wales certificate? Yes.
1193. And consequently, in addition to your personal experience, we expect you to know a good deal. You have read a little, and I suppose you have read of other cases where there was gas under heavy pressure? Yes.
1194. With that knowledge do you not think there might be pressure enough in this coal to burst through 4 feet of stone? I have seen no evidence in this colliery of that.
1195. I am not speaking of that, but is it possible that there might be pressure to that extent? It is not impossible: I have seen pressure enough to bring the floor to meet the roof.
1196. Have you any idea of the quantity of gas it would take to fill the space that appears to have been filled by the explosion? As far as that goes, 3 feet of gas can be compressed into 1 foot.
1197. How many cubic feet of gas would it take to produce the cubic capacity occupied by that exploded gas? I could not answer that accurately.
1198. *By the Chairman:* Would a mixture of 1 in 12 explode? Yes; but 1 in 7 has the greatest explosive force.
1199. *By Mr. Fryar:* Say that 1 cubic foot of gas makes an explosive mixture of 12 feet—when that atmosphere explodes have you any idea of the extent of the flame it would cause? No.
1200. Have you ever known, in the course of your experience or reading, of a case where five men were absolutely killed by burning from an explosion and so many others closely situated around them were not hurt? Yes; in South Bulli, seven years ago, a man named John Tresder was burnt in close proximity to other workmen and died through the effects of the burns, while the others were uninjured.
1201. Was that in the whole or the broken coal? In the whole.
1202. In this case it was five men in the broken. Do you know of any such case like that where a number of men have been killed and the others close by have not been hurt? No; I have no other case that I can refer to; not under similar conditions.
1203. And you do not know the amount of expansion that takes place on explosion? I am not too certain of the amount. I do not want to guess at figures and make myself ridiculous.

JOHN TENCH, ex-miner, examined:

J. Tench. 26 Apr., 1900.

1204. *By the Chairman:* You are one of the miners who sat with the warden at the inquiry into the Torbanlea accident? Yes.
1205. And you are a practical miner? Yes, so far as coal-mining is concerned.
1206. Have you had a long experience? Forty years.
1207. Where did you gain your experience? In various parts of England. In Staffordshire I had seventeen years, ten years in Derbyshire, and I think the rest under Mr. Rankin.
1208. How long were you with Mr. Rankin on the Burrum? I was working in a mine on the Burrum for sixteen years.
1209. In what capacity are you working now? I am not working in a mine now.
1210. You heard the evidence given at the former inquiry before you visited the Torbanlea Colliery? I did.
1211. And you went over the workings? As far as we could.
1212. Did you meet with any gas in going over the workings? We did.
1213. Where was that? Through a door in the dip.
1214. At the top of the dip? A little above where the men were burnt.
1215. Was there much gas there? Well, there was plenty to send us to the other land, I think. The lamps, to my mind, were inferior.
1216. *By Mr. Rankin:* Did the gas fill the lamp? It did, and very quickly.
1217. That gas had accumulated through the door being closed? The air was cut off the dip, and the door being closed any gas that was there would rise up to the door.
1218. *By the Chairman:* Will you just state to the Commission what you saw, and any conclusion you came to as to the cause of the accident? We went down the dip twice. The first time we went down we went to the scene of the explosion; we also went to where Caldwell, the overman, was

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sitting, and then we came back to the School of Arts here, and drew, as far as our abilities would allow us, a plan of the workings where we had been. We felt dissatisfied then, because we found out that there was a level where nine men were working on the day of the accident, and we had not connected that level with the scene of the accident. We then went back to that level, and came round the airway to get to where those nine men had been working. That was the missing link in our inspection; we could not account for the gas coming from the back of the dip with the current of air that was kept going at that time. In travelling that airway we came in contact with a fall; both Mr. Sharp and the overman declared that they had travelled that way that morning, and that there was no hole there, only a small hole. We came to the conclusion that if gas had gathered on the top of that small hole it must have been forced out or liberated by the large fall, because it came in contact with the boy's light, and he was furthest up the dip.

1219. That is the way the air would come? Yes. We came to the conclusion, and were firmly convinced that the gas went from the hole.

1220. Were the nine men higher up than the Houstons? They were higher up. Had the gas been forced from the bottom of the dip against the air, my experience is that there was enough to turn the thing inside out, but we thought it impossible for it to come from there.

1221. And that was the opinion you came to after examining the workings? Yes. When we found that hole we came back to where we had been, and went to the place where the disaster occurred, and came up another level between the dip level where we went in and the place where the men were working. We went there, and came in contact with this fall; it was a tremendous fall.

1222. Could you ascertain the height? No, we could not, but we found no gas there. When we went down the dip there was no air, the door in the level having been taken off, but we had a door put on, and we thought that the air travelling over the fall after that must have kept it clear of gas.

1223. Then the only place you found gas was where it had accumulated at that door? Yes.

1224. *By Mr. Fryar:* And the air was coming through from the nine men in the upper level by way of that fall? Yes.

1225. *By Mr. Glassey:* Right down to where the Houstons were working? It passed through, and went down below, but we could not go below, because we did not think it was safe. We were quite satisfied with what we saw there.

1226. *By the Chairman:* Did you thoroughly examine the places where the Houstons and the other men were working? Yes.

1227. Was there any gas there when you were there? There was a small quantity of gas right down to where they were working opposite this door. There was none in where they were working; it was only in the dip.

1228. *By Mr. Rankin:* They were right in the air where they were working, and there would be no accumulation of gas? No.

1229. *By Mr. Glassey:* The result of your investigation was that you came to the conclusion that gas had accumulated and lodged in some crevice or some place in the waste, and that the big fall to which you have alluded forced that gas out on to the men where they were working? No; I think we made a proviso that if the gas was on the top of this fall—we could not say it was—the large fall drove it out; and that if the gas was not there, then this large fall liberated it from somewhere else.

1230. Supposing there was gas in the waste round about any of the crevices, it would have the same effect as if it had gathered in the crevices? Yes.

1231. That is your unanimous opinion? Yes.

1232. And you found more or less gas right from the opening of that door down as far as you could get? Yes; but the biggest portion of the gas was against the door.

1233. *By Mr. Rankin:* Did you find some gas all the way as far as you went? No; it tailed itself out some 6 or 8 yards from the door.

1234. *By Mr. Fryar:* When you say there was a small quantity, how do you measure it?—Do you refer to the space it occupied or to the appearance it gave to the flame of the lamp? I refer now to the space it occupied.

1235. Then how did you find it was there? We found it with the lamp; we would have found it out a bit earlier if we had had a naked light.

1236. How did it exhibit itself on the lamp? The same as it usually does—it filled the lamp.

1237. *By Mr. Glassey:* Was there a blue cap on the light? Yes.

1238. *By Mr. Fryar:* Quite blue? It was blue enough; it satisfied every one of us, Mr. Sharp as well, that the gas was there.

1239. Can you give us any idea of the length to which the flame tapered? I dare say it was about 1½ inches, and that was quite plenty.

1240. How far was that below the door? That was as soon as we opened the door; that is where we came in contact with the gas.

1241. *By Mr. Glassey:* Right up at the roof? Yes, it would be 2 feet from the roof.

1242. *By Mr. Fryar:* Seven or eight yards down where it tapered, how did it show on the lamp? As soon as we opened the door and found the gas we all sat down for a while, and gave it free course for the air to clear it, and when we made the attempt to go down 6 or 8 yards from the door it was free altogether.

1243. Can you describe its appearance on the lamp? There was one man between me and the lamp, and there were only two lamps for the six of us; those were all the lamps we could have.

1244. Had you a lamp? No, I had not a lamp.

1245. Did you use a lamp? Yes. I believe it was Mr. Sharp who had the lamp in his hand at the time, and he tried the gas. According to what I could see, I came to the conclusion that there was a fair quantity of gas there, and that it showed itself in its blue colour on the lamp.

1246. Can you tell us the length of the halo, or aureole as some call it? It did not flare in the lamp, but the light gradually grew to 1½ inches anyway.

1247. *By Mr. Glassey:* Have you worked in any gassy mines? I have never been where there is any need to work with a lamp; when I was a boy I used to go round with the man early to try the gas—that is my greatest experience.

1248. Where was that? In Staffordshire.

1249. Whereabouts? Not far from Dudley. I have never had any experience of gas in the colonies.

(Torbanlea.)

FRIDAY, 27 APRIL, 1900.

PRESENT:

MR. RANDS | MR. GLASSEY, M.L.A.
MR. FRYAR | MR. RANKIN
MR. THOMAS.

MR. WILLIAM HENRY RANDS, CHAIRMAN.

DANIEL RODERICK, miner, examined:

D. Roderick. 27 Apr., 1900.

1250. *By the Chairman:* You were one of the miners who sat with the warden at the statutory inquiry? Yes.
1251. You are a practical miner? Yes.
1252. And where are you working now? At Howard.
1253. How long have you been working in this district? Twenty-one years.
1254. Have you had any experience elsewhere, previously? Nineteen years in the old country.
1255. What part of the old country? In the Dowlan Company's collieries, and in the Rhondda Valley, in South Wales.
1256. Had you experience there in any fiery mines? Yes, both with naked lights and safety lamps.
1257. Did you ever use naked lights in a mine where gas was known to exist in the old country? Yes.
1258. You trusted to good ventilation? Yes.
1259. After the first inquiry you visited the Torbanlea mine? Yes.
1260. Did you visit the spot where the accident took place? Yes.
1261. Will you describe what you saw there? As soon as we got through the door we found gas.
1262. Where was the door? In the dip.
1263. *By Mr. Glassey:* That door was closed when you went down? Yes.
1264. And as soon as you opened the door you discovered gas? Yes.
1265. Where was the gas located? It was coming half-way down to the floor from the roof.
1266. *By the Chairman:* You had safety lamps? We had a safety lamp.
1267. And you discovered gas immediately you opened the door? Immediately we opened the door.
1268. What distance down from the roof was it? It might have been 3 feet.
1269. Did it show on the lamp at once? It showed on the lamp at once. The flame began to increase.
1270. What was the length of the flame? I did not notice. It might have been 2 or 3 or 4 inches. After we saw that we did not risk much, because we did not know what there might be there.
1271. *By Mr. Rankin:* You did not take particular notice of the measurement of the flame? Of course not.
1272. *By the Chairman:* What did you do then? We went as far as the place where the men had been working, and we saw the same sign there. Of course we kept the lamp as low as we could.
1273. You saw gas there? Yes, just as we entered the pillar from the dip.
1274. You saw signs of gas again there? There were signs there.
1275. *By Mr. Glassey:* Was that in the dip itself, or in the place where the men were working? At the side of the dip. McKinnon and I went in, but we took no lamp inside.
1276. But where you left the lamp standing you saw signs of gas? Yes.
1277. *By Mr. Rankin:* Had you not a safety lamp when you went to the edge of the place where the men had been working? Yes, up to the edge, but we did not take the lamp in. Mr. Sharp had charge of the lamp at the time.
1278. *By Mr. Fryar:* Was it after you set the lamp down that you saw gas on the edge? The lamp was still in Mr. Sharp's hands.
1279. Was it the fact that you had seen gas that made you keep the lamp outside? We considered that the gas was there, and we did not think it was safe to take the lamp in.
1280. But did you see the gas exhibited on the flame? Yes, as far as we took the lamp.
1281. How far was that? To the edge of the dip.
1282. Which side of the dip was that? The right hand side going down. The lamp never went further.
1283. *By Mr. Glassey:* Where was Mr. Sharp with that lamp? He was on the side of the dip.
1284. Close to the place where the Houstons were working? Yes.
1285. *By Mr. Rankin:* And near the door? Below the door.
1286. How far below the door? A good bit below. The intake was below the door. This was below the intake.
1287. *By the Chairman:* You examined those workings in the dark? Yes.
1288. And what did you do next? Mr. Sharp told us that they made an error in the report of the inquiry as to where the overman and young man were at the time of the accident. Instead of being in the return they were in a cross-cut just opposite where the deceased men were working. He showed us that place and we got in.
1289. Did you at that time examine any other portion of the workings? Not at the time.
1290. What did you do then? We came back. We did not go down to the lower end of the dip. When we began talking together we thought the cause of the accident must have been in the other direction.
1291. What direction would that be? When we came out we thought it must have been from the other side, where the nine men were working, and we determined to go down again and have another look.
1292. Did you go down again? Yes.
1293. The same day? Yes; on the 4th of April.
1294. *By Mr. Glassey:* The nine men were together on one side of the dip and the other men on the other side? No, the same side, but a different level.
1295. *By the Chairman:* Where did you go to the second time you went down? We went in as far as the door on the level, and the overman put the door half-way up to turn a bit of air on there for us. We

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went down through where the air course was taken and into the place where the nine men were working —I believe they call it Hamilton's level. We went in there and down into the air course from that place towards where these men were working in the dip.

1296. That level is the one above the 100-yards level? Yes; above the door.

1297. About how far did you go? Right to the face of the level.

[*Witness here described on the plan the route taken by the jury when inspecting the mine.*]

1298. Now will you say, so that it can be recorded, what you did. You first went to the face of the level? Yes.

1299. And then? And then we came back into the air course.

1300. *By Mr. Glassey:* Was Mr. Sharp with you all that time? Yes.

1301. And you had the lamp? He had the lamp.

1302. Did you discover any gas at all in there? Not a sign.

1303. *By the Chairman:* You came back along the air course? Yes, and there we met with a big fall which blocked us and we had to return back the same way. Then we went down through the door and down the dip and went into the next level above where they were working.

1304. The next level below? Yes; where the nine men were working.

1305. The 100-yards level? Yes.

1306. When you went in what did you see? We were blocked on that side again with a fall.

1307. Did you find any gas there when you went in the second place? No.

1308. Did you go again to the place where the Houstons were working when the accident occurred? No, we did not go there again.

1309. Try and remember whether you did go in again with a light. Did you go in at all with a light to where the Houstons were working, or anywhere near there? No, as I said before, the light was kept on the side of the dip.

1310. *By Mr. Rankin:* That is the safety lamp? Yes.

1311. *By the Chairman:* Would it be possible to see whether the props were burnt or singed at all where young Houston was working? Yes; coming into that big fall from the dip I touched the prop, and I called Mr. Sharp back to take notice of it. The props were burnt in that place towards the fall.

1312. Towards the fall? Yes.

1313. *By Mr. Glassey:* You found the props charred? Yes.

1314. You could not see them, surely? No; I called Mr. Sharp back with the lamp to see them.

1315. *By the Chairman:* In giving your report you have expressed the opinion that the accident was caused by that fall—I suppose you are still of the same opinion? Yes. That day we were particular, and Mr. McKinnon and myself felt if we could get any cracks in the roof or the bottom to find out if there was any "blower" that would cause the accident.

1316. Just state anything you would like to mention in connection with the matter, about which you have not been questioned? We were convinced then that the explosion originated from the fall, and for my part I do not alter that belief.

1317. *By Mr. Glassey:* In going into Houston's place, of course, not having a light, you would not be in a position to see whether the props there were charred or not? Yes; where we could feel them. The props on the outside were charred, and we called the attention of one another to them.

1318. That is outside where Houston was working? Where the boy Houston was working.

1319. Was the father or the boy working nearest to the dip? The boy.

1320. And where the boy was working you found the props charred? Yes.

1321. You did not examine them? The light was close to where the props were.

1322. You also found the props charred further on nearer Hamilton's level? Yes, worse than below.

1323. What is your opinion as to the cause of the props being more severely charred at Hamilton's level than at the bottom level? My belief is that the strength of the gas was there, and that it diminished in power as it went down the dip.

1324. *By Mr. Fryar:* When you say the gas, you mean the exploded gas? Yes.

1325. You think the accident originated with Houston? Yes, it ignited where Houston's boy was. Our opinion, honestly, is that the gas came from that big fall.

1326. How is it, if it originated with the Houstons, and the props were charred there, that the props were worse charred up in the other level? They might be a different sort of props.

1327. It would be going against the air? Yes, on its return it would have gone against the air.

1328. On its going from Houston to the other level? Yes; that is on the intake.

1329. Is there any probability that it originated in the upper level? No.

1330. You saw nothing to lead you to that conclusion? No.

1331. *By Mr. Glassey:* You have expressed the opinion that the gas was forced out of that level by the force of the fall to where the Houstons were working? Yes.

1332. And you think that is where the explosion took place? Yes.

1333. As far as you were able to observe with your limited light, what area of ground do you think that fall covered? I could not say.

1334. Supposing there were two or three rooms, and the pillars had been pretty well taken away—it might be that a little was left here and there to steady the ground—as near as you are able to judge, what area of ground would that fall cover? I could not say. We thought we came about 25 yards from the other side, and about the same distance from the dip side of the fall.

1335. Did the fall pretty well cover all that area? The fall was in between.

1336. At any rate, it was a large fall, covering a considerable area? Yes.

1337. You could not see the top of the fall? No.

1338. Did you examine it with a safety lamp to see if there was any gas located there? McKinnon and Sharp were in the place, and had the lamp out as far as they could go, and they could not discern anything.

1339. Have you any idea what was the area of waste from that fall? No. Of course, if I had been working in the mine I would have had an idea.

1340. I think you told us you had been a long time in coal-mines? Yes; about forty years.

1341. And you said you had been seventeen years here? Twenty-one years.

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1342. And about nineteen years in the old country? Yes.
1343. Then you emphasise the fact that, in your judgment, gas must have been lurking where that fall took place, and must have been forced out to where the Houstons were working with a naked light? It must either have been lodged there or have been liberated by that fall—one of the two.
1344. *By Mr. Thomas:* Supposing this accident had not happened in that place, and you were working pulling out that pillar, would you, from your experience in mining, consider it necessary that you should work with a safety lamp? No. From what we saw, I think I have worked with a naked light in places where there was more gas than there was there.
1345. *By Mr. Rankin:* You have worked where there was a larger accumulation of gas than you saw there? Yes; and I believe that if that had been a thick-seam there would not have been a life lost; because the damage done on the face was nothing.
1346. I suppose, when you were a boy, you many times shoved your candle into a little pocket where the gas was, to see it blaze? Many a time.
1347. I mean that as a boy, when you know there is a little bit of gas and very little danger, it is not uncommon to shove your lamp into such a place? No; it is not.
1348. *By Mr. Fryar:* Presuming that the gas was liberated by the fall at the dip, is it probable that you would not have been able to see the gas at the edges of the fall when you went in? The second time we got round there was a little air going round, and while the gas might be in the dip we might not discover it. We asked for a door to be erected so that we might get a little air.
1349. I only speak of the gas which was liberated by the fall. It would have to go down below the roof to get out, and consequently what was left would be down by the roof? Yes; it had to come down to the current of air to get out.
1350. And, consequently, unless it could get out by some other means afterwards it should have been discovered with the safety lamp? We did not discover it. At the Rhondda Valley, when blowers would break away, we could hear them for days like roaring thunder, and the boss would be glad to see them break away.
1351. *By Mr. Glassey:* You have no idea when that fall took place? No.
1352. Supposing it took place on the 21st, the day of the accident, and having liberated a certain portion of gas, would the door which you erected have cleared that gas pretty well away prior to your visit? We did not see any whatever.
1353. *By Mr. Fryar:* But when you shut that door did that necessarily imply that the air came in that way and got out by some other means? When we put the door in the level the current was going down.
1354. *By the Chairman:* When you went into the level above where the Houstons were working—the 100-yards level—and noticed the props burnt or charred, which side was charred? In the back as we were going along there was a great weight in the place, and the props were broken almost in half. I put my hand against one and it was burnt sideways like from the dip.
1355. As you went into the level was the charred side facing you or was it on the other side? The side from the dip. It would be the side we were going in from the dip. That was where our hands were as we went along.
1356. But not on the other side? I did not notice the other side.
1357. And that would be the side the air was coming in? The air was coming in from there.
1358. *By Mr. Rankin:* Was it the side facing you coming in? Yes.
1359. It might have been on the other side too, but you did not feel it? We did not feel it.
1360. It was on the side coming up the dip? No, the side facing the dip as we went in.
1361. *By Mr. Fryar:* How far was it in that the props were charred? Just inside the fall.

ROBERT RITCHIE, miner, examined:

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1362. *By the Chairman:* You were one of the miners who sat on the statutory inquiry into the Torbanlea accident? Yes.
1363. Are you working at the Howard now? No, I am working at the Burrum.
1364. How long have you worked in this district? A little above fourteen years.
1365. Where were you before that? In Scotland.
1366. For what time? Eleven years.
1367. What part of Scotland were you working in? In Lanarkshire. Archibald Russell was the coalmaster I worked under. I was at his place the longest. In the Hamilton district also I did a little work.
1368. Did you work in any mine that could be called a fiery mine? I have worked in mines with safety lamps.
1369. And in some without safety lamps? Yes.
1370. Then you have had a good deal of experience? Yes, a fair amount.
1371. On the 4th of April I believe you visited the Torbanlea mine? Yes.
1372. Will you tell us what workings you visited? If I had a plan I could show you better.
1373. You went down to the dip? Yes, and we examined the place where the men were working.
1374. Before you got there you came to a door? Yes.
1375. When you opened the door did you notice anything? We could discern a little gas when we opened it.
1376. Only a little gas? Only a little.
1377. How did you come to the conclusion that there was only a little? By the height we could get the safety lamp up.
1378. How far would that be from the roof? About a foot.
1379. Then after opening the door where did you go? We went straight down the dip to where the men were working.
1380. And as you went down the dip did you meet with any gas? No, there was no gas going down the dip.
1381. Did you go into the place where the Houstons were working? Yes.
1382. Did you meet with any gas there? We could just notice it in the lamp.

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1383. Did you take the lamp right in? We took it along the face where the Houstons were working.
1384. Right inside? Yes.
1385. Until you came to where John Houston was working? Yes.
1386. That would be right in the room? Yes, right in the room.
1387. How far from the dip would that be? Say seven yards in.
1388. Did you examine with the lamp the place where the Houstons and the other men were working? We examined where Houston was working. We did not examine much where Griggs and Johnstone were working, as their place was open.
1389. Did you notice anything during the course of your examination of these working places? Down there we did not notice anything particular.
1390. Did you feel for any cavity where gas might have escaped, or did you see any? We felt, but we could find nothing.
1391. Then what did you do? We looked about us and examined some of the props to see if any were burnt, and we observed a little charring on the props.
1392. That was where the Houstons were working? On the dip, on the top side of the Houstons.
1393. You noticed that the props were charred? Yes, a little.
1394. Just slightly? Sufficient to let us know that such a thing had occurred.
1395. Then you returned to the surface? Yes.
1396. And afterwards did you determine to visit the mine again? Yes, we thought we would have a look from where the men were working in the level above where the explosion took place. We went to the manager and requested permission to go down, and we of course got down.
1397. And then you went into the upper level where the nine men were working? Yes.
1398. Will you tell us what you saw there? After we went into that level we went down the face of the level by the airway and we came to a fall.
1399. That blocked you? That blocked us from travelling further that way. Of course we examined that fall as far as we could reach up with the lamp, and could find nothing.
1400. You could not find any gas? No, no gas.
1401. Anywhere in that level? Of course, we did not examine it at any place except the fall.
1402. Could you tell whether that was a recent fall? No, we could not tell that for certain; all that we had for it was the overman's word that when he went there on the morning of the accident it had not occurred.
1403. Then you found no gas at all in that particular level where the men were working? We did not examine the upper level at any place until we came to the fall.
1404. And that blocked you? Yes; then we went back along the level down the dip to the level above where the accident occurred, and when in there we came to the fall again.
1405. How far would that be from the dip? About 30 yards in.
1406. Did you find any gas there? No, no sign of any gas.
1407. Did you notice anything with reference to the props? Yes, I noticed that the explosion had been severer there than in any part we had examined.
1408. How did you judge that? From the props there being more charred than in any other place.
1409. Which side of the props was charred—the side facing you as you went in? Yes, the side facing us as we went in.
1410. Did you see any break or upheaval in the pavement there? Not going into the fall, but from the level above, before we came down to the fall, on that side of the fall, we could see an upheaval in the floor.
1411. Was the floor cracked at all? Yes, it was cracked a little bit.
1412. In your report you express the opinion that the explosion was caused by that fall taking place, and dislodging the gas from wherever it might have been—Have you any reason to alter your opinion? No, I have no reason to alter my opinion.
1413. You still think that is where the gas came from? Yes.
1414. Where do you think the gas was that this fall disengaged? I think the gas was buried in the fall that had come down.
1415. In the fall that had come down originally? Yes.
1416. You know that that was examined on the morning of the accident, and that no gas was found there? I could not say whether it was examined or not.
1417. We have it in evidence—did you know that at the time you came to your conclusion? Yes; we had the evidence before us at the time.
1418. The evidence that there was no gas in that previous fall a short time before the accident occurred? No; we had no evidence with regard to that fall.
1419. I understood you to say that the gas which this fresh fall—which is really a continuation of the old fall—disengaged was probably collected in the old fall. Didn't you say that? No; there was supposed to be a fall before that, but we had no evidence to show whether there was any gas in that fall.
1420. No; but did you not say just now that you concluded that the gas which was disengaged at the time of the accident was collected, or accumulated, in that fall? Not in the previous fall.
1421. In the fall itself? In the fall itself.
1422. Well, just put in your own words where you consider the gas came from that was disengaged by the fall? I consider it was buried in the present fall, not in the previous fall.
1423. That is, the fall disengaged the gas from the solid strata? That the gas was buried in the fall that took place after the fireman had examined the place on the morning of the 21st of March.
1424. *By Mr. Glassey:* We wish to be clear on that point. In your opinion the gas was buried in the strata, and when that strata came down it liberated a portion of the gas buried in the strata itself. Is that it? Yes.
1425. Is that clear? Yes, that is clear.
1426. Is that fall a continuation of the previous fall of which we have heard a good deal, or is it a new fall? We cannot say that personally, but the manager and overman say that there was a fall previously.
1427. Was there any distance between the fall the manager said he had examined and the fall to which you allude? He said that the fall which had taken place previously was not the fall that we examined.
1428. But was it a continuation of the same fall? Yes, it was a continuation of the same fall.

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1429. So that the fall which you discovered was alongside and formed a portion of the fall to which you allude? Yes.
1430. Do you think the previous fall would not have liberated a portion of the gas, or was the portion to which you allude simply confined within the area of the second fall? What we allude to, as far as our verdict is concerned, was liberated by that fall itself.
1431. Were all your colleagues agreed on that point? Well, according to the verdict that is so.
1432. When you discovered that fall Mr. Sharp was with you? Yes.
1433. Did he appear rather astonished to find that fall there? Yes; he said that fall had not occurred when he was there last.
1434. That was when the overman was there in the morning? Yes.
1435. Did Mr. Sharp say when he thought that fall had taken place, or that it was the cause of the accident that day? He did not express an opinion on that—not a word.
1436. You say you have had considerable experience in mines in Scotland—is that in Russell's of Wishaw? Yes.
1437. Robert Russell's mines in Wishaw? No, Archibald Russell's.
1438. Were those mines located near the Clyde side? About a mile from the Clyde side.
1439. In what year were you there? I was working there from 1877 till 1885.
1440. What was the number of that mine? There was no number to it.
1441. What do they call the mine? Silverton Hill. He had two mines—one went under the name of Silverton Hill and the other under the name of Burncliffe.
1442. Where did you work previous to that? At Edelwood.
1443. When did you come out to this country? In the latter part of 1886.
1444. After having worked in mines in Scotland for how long? Eleven years.
1445. And you have been here since 1886? Well, I was six weeks working on Gympie.
1446. When did you come to the Torbanlea mine? In the latter part of December, 1886.
1447. How long did you continue to work there? Well, the only work I have done in the colony, except the six weeks I worked at Gympie, I have done in Torbanlea.
1448. When did you leave Torbanlea—since the accident? Since the Isis Company took over the Burrum mine.
1449. How long ago is that? About nine or ten months, I think, but I cannot say for certain.
1450. Are you the Robert Ritchie who was burnt in the Torbanlea mine on the 9th of February, 1896? Yes.
1451. Were you severely burnt? Yes.
1452. How long were you off work? Seven weeks.
1453. Did you get any pay from your employers during the time you were off work? I got full pay from the 9th to the end of the month in which I was working, but nothing afterwards.
1454. What amount did you receive altogether from the company? I think it was 8s. 6d. a day I was receiving at the time.
1455. Did that money come from a general fund contributed by the employers and the workmen, or from the employers themselves? From the employers themselves.
1456. Was there any fund established at the mine? Not at that time.
1457. You continued working in the Torbanlea mine after that? Yes.
1458. Where did the gas from which you received injury that day come from? I could not say. It could not be from a fall because there was no fall.
1459. Were you working in the room? No, it was a dip that I was driving down and we wanted to drive an overcast over the main road.
1460. In driving that overcast did you strike a little seam of coal? Yes.
1461. Did it ever strike you that the gas came from that little seam of coal? No, it never occurred to me where it came from.
1462. Previous to that had you seen any gas? No.
1463. Were you troubled with black damp? Yes, being an overcast we did not drive it wide enough to take the air into it.
1464. You do not remember seeing gas in Torbanlea up to the date mentioned? Never.
1465. Did you see gas frequently after that? I saw it sometimes afterwards but not in great quantities.
1466. At what time of day was it that this accident occurred in 1896? A few minutes before 9 o'clock that night.
1467. You were working on the night shift? Yes.
1468. Had the man who preceded you seen any gas that day? No. It was on the Sunday night that I got burnt. He knocked off on Saturday evening. I worked on Saturday through the day, and he followed me on the Saturday afternoon. He explained to me that his lamp burnt the same with him on that shift as it did with me.
1469. Was the fan in operation then? Yes.
1470. Had it been working on the Sunday at all? I could not say.
1471. Did your colleague meet any gas in the succeeding shift in this place? He never said so to me.
1472. From the time of resuming work after an absence of seven weeks from the 9th February, did you see gas in the Torbanlea Colliery from time to time? I have seen a little of it.
1473. You saw it in the lamp? I have seen it in the Davy lamp and I have seen it in the small lamp.
1474. At the period you were burnt were you on contract or day work? I was paid at per day.
1475. And did the overman report from time to time that the place was safe in the morning? Well, it was only the week previously that we had started the place.
1476. In the neighbourhood where you were working, was gas reported to have existed then? Never that I was aware of.
1477. How often do you remember having seen gas from the time of your accident up to the time you left the Torbanlea Collery? I dare say I have seen it half-a-dozen times.
1478. Was it in any large quantity? No; I never saw any large quantity.
1479. Where did you usually find it—in the rooms? Well, we would find it when boring for shots and cleaning out a hole. Of course it would be a very small quantity.
1480. After your shots had exploded did you ever notice a flare of gas? Not after the shots had exploded.

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1481. In your opinion, as a practical miner, was the mine always fairly well ventilated? Yes, in my opinion it was always fairly well ventilated. As far as I could see, if there was any leakage of air, any stoppage or gob, the manager got fine stuff off the road and closed up any holes in the gob to prevent the air escaping.
1482. Coming back to the accident on the 21st March, you have no doubt that the gas was liberated by this fall? Yes, I formed that opinion.
1483. Do you think there is a likelihood of gas accumulating in the waste workings where that fall took place? I could not say whether there is or not.
1484. Would the waste workings be sufficiently ventilated to prevent gas gathering? Of course I cannot say. I did not go round the waste workings to see.
1485. When gas has been seen from time to time, is there not a likelihood of it lodging in the waste workings? There is a likelihood.
1486. And it being there, would such a fall as the one you have described not force that gas out? Yes, if any had lodged there.
1487. Was there a likelihood of any lodging there? No; I do not know—not in that particular part of the waste.
1488. But supposing it had been further in, away from the air course, is it likely it would lodge there? It is quite possible it might lodge further in.
1489. And the concussion from that fall would have forced that gas out to where the men were working? No, it would have forced it further back into the waste. It would not drive it out.
1490. How do you form that opinion? Because with the waste working being in the inside it would force it back more than against the current of air.
1491. The concussion would not be sufficient to force it out? It would have a bigger opportunity of forcing it back than out.
1492. Would there not be a wider scope for it coming out than going back? That depends upon what waste workings you had got.
1493. At anyrate you think the concussion would have sufficient strength to drive the gas into the old workings, but not drive it out? No; my opinion is that it would have a bigger chance of driving the gas into the waste workings than driving it out.
1494. How do you form that opinion? There is the air for one thing. On the other hand, there is no air at all to prevent it going back.
1495. Was the fall a large one? Yes, a large fall.
1496. Covering a large area? I should think 25 yards long.
1497. Do you not think a fall of those dimensions would drive the gas out to where the men were working? I do not say it would not be sufficiently strong, but I say it would have a better chance of driving the gas backwards than forwards.
1498. But supposing the fall is not limited and is right in the gas region, would that not drive the gas out? It would drive it out, but I say yet it would have a bigger chance of driving it back. If there was a large quantity it would drive some of it out.
1499. This same fall was 25 yards long, and we do not know how broad; therefore, is there not a great likelihood of that fall driving the gas out that caused the recent explosion? In my opinion it came from that fall.
1500. But in addition to that, supposing gas had accumulated in the old workings, and they had tumbled in, would that not be sufficient to force the gas out? Possibly; it is impossible to say.
1501. Supposing the fall was sufficiently broad to cover the whole area of the excavations, where would the gas have been forced in? Not if it went the whole distance back into the waste workings.
1502. You say you could not tell the breadth of it? No.
1503. So that there is a strong probability that the fall was sufficiently broad to cover the gassy area in the old waste? I could not say that.
1504. *By Mr. Thomas:* You say you took a lamp in and examined the place where the men were burnt? Yes.
1505. How many lamps had you? We had only one lamp with us. The manager offered us a Clanny lamp, but there was one of the number objected to that Clanny going in, so that we had only one lamp.
1506. You had only one lamp among five of you? Among six of us.
1507. Who was carrying the lamp? The overman sometimes, and one of our number sometimes; I had it myself in my hands.
1508. You do not know who was holding it when you examined the place where the men were burnt? Yes; one of our number went and examined it.
1509. *By Mr. Fryar:* When you came along that particular level and were blocked by the fall, the manager and overman were leading, I presume? Yes.
1510. Did they expect to get there? Yes, as far as I am aware.
1511. Well, they brought you there for that purpose? Yes; we told them we wanted to examine the place from where the nine men were working to where the accident occurred and where the other men were burnt, and, of course, he took us that way.
1512. And you came to a fall which the manager and overman were surprised to see? Yes. Well, the overman said it had not occurred on the morning of the 21st of March.
1513. There had been a fall in that neighbourhood previously? The manager and overman said so.
1514. Apparently, as far as you could see, the fall you met with was a continuation of the previous fall? Yes.
1515. And on the other side—that is, what we call the outside of that fall—was there a pillar of coal next the dip? Yes; there was a pillar of coal against the fall.
1516. It was between the larger fall and the pillar of coal that you intended to go through, and, so far as you knew, they were leading you to bring you through that way? Yes.
1517. Suppose that fall had not been there, would that have been the airway?—Did they say anything to lead you to suppose that that was the main airway? No, they did not say anything but what it would lead us to the main airway. The air was travelling that way when we were going round.
1518. It got over the fall? It got through the fall; the fall did not block the airway.
1519. That was very good evidence that it was the airway, was it not? Yes.

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1520. Consequently, if that was the airway between the old fall and the pillar of coal it was not a likely place for any gas to be standing? No, it is not likely any gas would be lying there at the time; there is no likelihood of gas lying in the main airway.
1521. I think Houston's place was spoken of as Houston's room? Either his room or his place.
1522. You know the difference between working a room and working a pillar. Was it a room? I would neither count it a room nor a pillar.
1523. What would you call it then? I would say that Houston was taking a strip off a pillar.
1524. Next the dip? Yes.
1525. You saw a little gas—I think that was the expression you used—after you opened the door? Yes.
1526. You also saw a little gas at the place where Houston had been working? Well, we could just discern it in the lamp.
1527. Did you see any gas between that bit you saw at the door and the bit you saw in Houston's place? None.
1528. Can you tell what distance that would be? From the door to Houston's place?
1529. Yes, or from the tail of the gas at the door to Houston's place? I would say between 50 and 60 yards.
1530. *By Mr. Glassey:* I think you said, in answer to Mr. Fryar, that this fall occurred in the main airway. Is that so? Yes.
1531. What is the usual width of an airway? The usual airway where there are head workings is 4 feet square.
1532. Then, am I to assume that this airway where the fall took place was limited to the extent of 4 feet? No.
1533. What then? Of course, it would be the main airway when it was going round those workings; but I could not say how far it extended back.
1534. Was there a pillar of coal from that main airway to the dip? From the bottom side of the fall to the dip.
1535. You say this fall took place in the main airway, and I think I heard you say there was one pillar of coal between the main airway and the dip itself? That is, the bottom side of the fall and the dip.
1536. I think you said, in answer to Mr. Fryar, that the officials of the mine who were leading you took you by the main airway, and that they took you as far as they could—until they struck the fall; is that so? Yes.
1537. Were the workings on the one side of the main airway—was the coal altogether taken away; or was the airway kept intact for air purposes as long as that place would last? There was a gob on one side of the airway, and a branch of a pillar of coal on the other side down to the fall.
1538. Beyond that gob, what was there—waste workings? A little waste workings; but I could not say how far they extended.
1539. What do you mean by a little—how many yards? It might be only the breadth of a room.
1540. It might be the breadth of ten rooms? No, it could not be the breadth of ten rooms, because this gob was on the left-hand side, near the dip—not in the waste workings.
1541. How was it that the fall covered the airway, and did not extend further into the waste from the airway? The waste was on the back side of the airway.
1542. To what extent? I could not say how far the waste went.
1543. So that, in reality, you could only see one side of the fall. Can you tell us how far it extended in the direction you could not see? No.
1544. Then, the fall might have been 30, 40, or 50 yards long one way and 25 yards long the other way? That would depend upon the way they were working it.
1545. Then, you cannot say to what extent the fall went into the waste? No.
1546. Therefore, there is a probability that by the extension of that fall into the waste it may have forced gas out, if it was lodging there? It may have forced gas out.
1547. Do you remember who handled the lamp in Houston's place? Mr. McKinnon.
1548. He went into Houston's place himself? Yes.
1549. Were the whole four of you all together at the time that examination took place? Three of us were standing in the dip and watching him with the lamp in the inside, while he examined the place.

FRANK D'ARCY, miner, examined:

F. D'Arcy. 27 Apr., 1900.

1550. *By Mr. Thomas:* What is your occupation? I am an engine-driver at the present time. I have been a miner.
1551. Where are you employed? At Torbanlea.
1552. Were you at Torbanlea on the 21st of March last? Yes.
1553. Working the engine there? Yes.
1554. Do you know anything that happened that day? Yes, an explosion took place.
1555. Did it extend up to where you were? Yes, the force of it.
1556. The fire? No, the fire did not come up my way.
1557. Did it cause any damage? Yes, it scattered a few things about.
1558. What did you do after the explosion took place? I went outside the door.
1559. Were there any other men there then? Not then.
1560. You were the first to get outside the door? Yes.
1561. Who came next to you? Andrew Anderson.
1562. Was he one of those who were burnt? No, he was working on the outside.
1563. Did you make any arrangements to see what had become of the others? Yes. I wanted some of the chaps to come back with me to get two safety lamps that were at the engine, and Allen was the one who said he would go with me. On the way in I met two young fellows coming out. They said they would go with me, and I sent Allen back. I got the lamps, and came out. I then saw Caldwell and Bowen, the horse-driver. Caldwell lit a lamp and gave it to me, and I tried to go down the dip. I knew the men were in there, but I could not get down.

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1564. What prevented you? Choke damp. I came back again, and found that Caldwell and Bowen had gone down the airway. I followed them down, and got down in time to see Caldwell fall off the bench on to the lower level. He said to me, "I am done." I said, "We will try and go through; you stop there, Jack." We then went down to the dip, and the lamp went out. I called to Jack, and asked him to put his lamp through the doorway so as to give us a light to come back by. Lewis and I and List went down the dip. The first one that we found was Jack Houston, and we brought him up. We went down again, and brought Sandy Houston up. In the meantime Bowen came, and we all went down, and brought Johnstone out. After we came up we were all done, and both Lewis and I started vomiting. Caldwell had gone up to see and get some chaps to carry the men from the dip level. He came back again, and said, "Griggs is there yet." I thought when they told me that Gambie was out that Griggs was out too, and as I was vomiting at the time I did not try to get down for another five minutes. Caldwell then said, "I will go and look for Griggs," and he and Allen went down and found Griggs. Allen could not help to carry him. The way he was burnt seem to sicken him. Caldwell then sent him up to say that Griggs was found, and to send someone down to help carry him up. Then the manager came, and he carried Griggs up on his back.

1565. From the time of the explosion, how long do you reckon it took to get the last of the men up? I could not say exactly, but it was a very short time. I do not think it would have been half-an-hour.

1566. *By the Chairman:* How were the men taken to the surface? The first three I cannot answer for, as I was down in the dip at the time; I only came up to the surface with Griggs.

1567. How was he taken to the surface? Along the main horse road, and wheeled up.

1568. Did he receive any treatment at the top of the dip? In the level he did; we had started to wrap him up.

1569. What did you wrap him up in? The first thing we could get hold of—shirts and canvas.

1570. Then he was taken to the shaft? Yes; some sheeting and one thing and another came down, together with some oil, and he was bandaged up as well as we could possibly do it. He came to consciousness there.

1571. Did you see him on the surface afterwards? No, none of them. I did not see Gambie at all; he walked up by himself.

1572. *By Mr. Glassey:* In addition to being an engine-driver, you say you have had mining experience? Yes.

1573. Where was that? In Torbanlea and at home.

1574. What part at home? In the Rhondda Valley.

1575. How long were you in the mines in the old country? About five years.

1576. What age were you when you went in? Twelve years.

1577. And seventeen when you left? Yes.

1578. Did you work in more than one mine? Yes, two.

1579. Were they extensive mines? Yes.

1580. Had you any experience of working in mines where there was gas? After I had been there about two years, I used to go round with the fireman in the morning.

1581. What did they call youths like you holding such a position? We call them fireman's boys.

1582. Before that what were you doing? Trapping—door-boy.

1583. That is, sitting behind opening and shutting a door in order to regulate the air? Yes.

1584. Three years? Yes.

1585. During the two years you were assisting the fireman, that was in a section of the mine, I suppose? Yes.

1586. Was it a large section? Yes.

1587. Was there much gas in that section? Yes.

1588. Did the men work with safety lamps? Yes.

1589. Always? Yes.

1590. Were there any open lights in that mine at all? Not in the section of the mine in which I worked, not even in the pit bottom.

1591. During those two years you would get a good insight into the nature of gas and where it was likely to be found? Yes. Another thing, I used to like the finding out of gas, and the fireman I was with was very communicative, and let me see anything.

1592. And naturally you would get a pretty good experience there? Yes.

1593. After having had two years of such very excellent experience, you came out to this country? Yes.

1594. And were howking, or hewing, coal? Yes.

1595. Were there any accidents in that mine during the time you were there? Not during the time I was there, but there has been since.

1596. You do not remember any accidents in the mine you had been at previously? No.

1597. How long ago is it since you came out to this country? I think it is fifteen or sixteen years ago.

1598. Did you go to work at Torbanlea then? No; I came up here, but did not start here.

1599. How long is it since you came here? About twelve years.

1600. Did you commence to howk coal? Yes.

1601. How long were you at that? Eighteen months or two years.

1602. During the time you were working at Torbanlea did you discover any gas? No; there was no gas in the old pit.

1603. You do not remember any? I know there was none in the old pit.

1604. How long have you been engine-driving? About twenty-two months.

1605. And between leaving the coal and the time you were engine-driving what were you doing? I was at the rush in New Guinea.

1606. After you came back from New Guinea you went engine-driving? I began on the coal, and then went engine-driving.

1607. How long were you on the coal that time? About three years.

1608. During that three years did you discover any gas? No.

1609. You have never seen gas in the Torbanlea mine? Yes, but not where I have been working.

1610. Where did you see it? In the main level.

1611. But not in the place you worked? No.

F. D'Arcy. 27 Apr., 1900.

1612. In the neighbourhood of where you worked did you hear other men talking about discovering gas there? No.
1613. Since becoming engine-driver have you from time to time visited the mine with the overman and manager? At night time.
1614. In the morning? No.
1615. So that you never went on tours of inspection in the mine? Yes, at night time.
1616. Was that before the men left the mine? Before the second shift came on.
1617. What time was that? 9 o'clock at night.
1618. At what time did the others knock off? At 4, or half-past 4 o'clock.
1619. So that there was always a second examination? Yes; I would mostly go down about 8 o'clock, and I stopped down in the dip until the men came to the top of the dip; they would be there about 9 o'clock. Sometimes I would go back again with them.
1620. When you accompanied the manager in his examination did he leave a mark showing whether the place was safe or not for the guidance of the men? Yes, the date.
1621. How long did you continue to assist in this examination? I could not tell you that.
1622. Only about how long? Well, say nine months.
1623. Did you do that right up to the day of the accident? No; I was on the day shift then, and I only did that when I was on the night shift.
1624. When were you working on the day shift? About twelve months.
1625. During your visits did you always find the manager and under manager careful? Yes, always.
1626. About having the ventilation right, and so forth? Yes.
1627. You had no means of ascertaining night by night the quantity of air circulating in the mine? No.
1628. Was the accident on the 21st March a violent accident?—Describe how you felt? From the first start of it?
1629. Yes? At the first start I had just landed from a journey out of the dip at the dip engine, and I was leaving the handles to go round and give the lad a hand to turn the wagons. Just as I left the handles and came round the corner I felt a force of air against me. It came very strong and put the lights out. I said, "Run, lad, there is an accident." The words were hardly out of my mouth before hot air, bits of coal, and dust came. I was turned round and lifted over the drum. I could hear that the lad was all right, for he kept saying, "Run, run." I came round and got over the drum again.
1630. What height was the drum from the top of the floor? There were two floors. From where I was standing it would be only about 3 feet 6 inches high, but from the bottom floor it would be about 5 feet.
1631. So that you were tumbled over that drum which was 3 feet 6 inches from where you were standing? Yes.
1632. With some violence? No, I only had a small cut on the back of my head. I was only half-way on the drum, or I must have been cut very badly.
1633. Was any timber knocked about? There was one slab there.
1634. You mean one of those cross planks? They used them for sleepers sometimes. The slab would be about 4 feet long, 6 inches wide, and 1½ inches through.
1635. Was that knocked from the roof? No, it was lying on its edge against the wall, and was sent into the engine-room.
1636. What distance was that from where the Houstons were working? About 100 yards.
1637. So that the explosion, which tumbled you at a distance of 100 yards up the dip, must have been fairly strong? Yes, it was pretty strong.
1638. The boy was not with you at the time this occurred? He was turning the wagons, and he got knocked down.
1639. None of the wagons were overturned? No.
1640. As soon as you got up did you go direct to where the Houstons were working? No, we did not go down there until we got all the men up.
1641. Previous to the 21st of March did you hear the men complain from time to time of gas being down there? No.
1642. Did you hear the overman express anxiety from time to time with regard to gas being down there? No; only once he said perhaps there might be a fall and some gas come, and when they thought that they shifted the men from the return.
1643. They would expect a fall, I presume, where the pillars were taken away from both sides? Yes.
1644. Do you think they had some knowledge of gas lodging there when they anticipated it coming out through a fall coming down? As they found small quantities of gas there from time to time, that would be a likely place for it to lodge.
1645. Was there any likelihood of that gas lodging in the old workings? No; if the old workings had any fall in them the air would have fetched the gas out.
1646. Supposing after the pillars were taken away some of the roof fell in where gas had been previously discovered, do you, from your experience in mines of that class, think there was likely to be an accumulation of gas there? It is quite possible that gas might accumulate there if there had been a fall in the roof.
1647. But if there had been no fall in the roof? No, not with the air they had working through the mine.
1648. Do you think there was a sufficiently high road where it came into the waste after the pillars were taken out? Yes, there was a piece of coal running between the two levels that was left in, and that would cause the air to come round and go out on the low side.
1649. But supposing falls had taken place, how was the air to get round to the nooks and crevices to clear all the gas out? There could a fall come there which would stop all driving of the air.
1650. Do you know that that occurred? No.
1651. Did you hear one of the men express themselves as to the cause of the gas being forced out? Yes; it was said there was a fall.
1652. From that neighbourhood where the overman expected it to come? From the lower part.
1653. *By the Chairman:* The lower part of the dip? Yes.
1654. Whom had you heard say that? Different chaps who were working.
1655. *By Mr. Glassey:* You heard nothing said on that point during that day after the accident? No.

ANDREW ANDERSON, labourer, examined:

A. Anderson. 27 Apr., 1900.

1656. *By the Chairman:* You were working in the Torbanlea mine on the day the explosion took place? Yes.
1657. And you were with Mr. Caldwell, the overman? Yes.
1658. When the explosion took place can you describe what you heard or saw? We were lifting rails, and Jack Caldwell said, "There, she is off now." There was a bit of a roar, and he told me to run and lie down.
1659. You immediately fell down flat? Yes.
1660. Did you see any light? Yes; I saw the light go up the air course.
1661. Did you feel much force from the explosion? No force at all.
1662. Did the flame come close to you? About 3 yards off me.
1663. Did you then hear any men singing out? Yes, I heard them singing out.
1664. Did you make out what they said? They said, "Oh, my God." That is all I heard them say.
1665. What did Caldwell say to you. Did he say anything about what he thought had happened at the time? No. He simply said, "She is off."
1666. What did you do then? Well, Jack Caldwell was going up the dip and he said, "Come on Andrew." It was too hot for me, and I stood there a bit. After that he sang out to me again, and I went to him.
1667. Going up the dip was it very hot? Yes; it very near choked me.
1668. Was there any difficulty in getting up? No.
1669. What were your duties? Well, I have been groom most of my time.
1670. What were you doing on that day? I was lifting rails in the level.
1671. That was in Houston's level? Yes.
1672. On the left-hand side of the dip going down and in the return? Yes.
1673. Those workings had been deserted? Yes.
1674. Then from your own experience the explosion was not a violent one? No.
1675. You got to the top of the dip? Yes.
1676. What was going on there? I crawled all the way up the dip right to the door.
1677. And had they got lights at the top of the dip? Yes, there were some lights.
1678. And then they started to rescue the injured men? Yes.
1679. Who went down? I think Jack Caldwell went down for one. That is all I saw, because I was out of breath and was not watching them.
1680. How long have you been in Torbanlea? Not quite two years.
1681. And most of that time you have been groom? I have been on the coal for a while. I have been on the coal, and wheeling for the company.
1682. For how long? For six months I was wheeling.
1683. In which part were you wheeling? We were in a part that is all worked out now.
1684. Had you been much in the dip workings? I had been in the dip helping to make roads, but I have not been on the coal in the dip. I did little odd jobs there.
1685. Then you would not know very much about the dip workings and the state they were in? No.
1686. On the day of the accident there was a good current of air? Yes, plenty of air.
1687. Quite as much as on other days? Yes.
1688. Did you hear any noise before the explosion took place? No, I never heard any noise.
1689. None at all? No.
1690. Have you fairly good hearing? Yes.
1691. Do you think there could be anything like a large fall without you hearing it? No, I do not think so. I fancy we should have heard it.
1692. I suppose you know that Mr. Caldwell heard a rumbling noise? No, I do not think so.
1693. You did not hear it? No, I never heard any noise.
1694. The first thing you felt was the rush of air and the flame close to you? Yes.
1695. You were not burnt yourself at all? No.
1696. How far were you at the time from the Houstons? About 12 or 13 yards.
1697. And how far from where Griggs and Gambie were working? Not much further than from the Houstons.
1698. In what position was the level you were in, in reference to them?—They were on one side of the dip, and you were on the other. Were they almost opposite to you? Houston was nearly opposite. Gambie and Griggs would be lower down.
1699. Did you notice anything unusual that morning? No.
1700. And you never heard the men complaining that they thought the mine unsafe? No, I never heard anything about it.
1701. You never heard of a meeting of miners to discuss whether it was unsafe to go down that morning? No.
1702. If there had been such a meeting would you have heard of it? Yes.
1703. You were on top that morning, and if there had been a meeting or any discussion you would have heard of it? Yes, I would have been sure to have heard of it.
1704. *By Mr. Glassey:* What age are you? Twenty.
1705. How long have you been at Torbanlea altogether? Not quite two years.
1706. And what have you been doing during the whole of those two years? I have been wheeling for about six men.
1707. About six months you were wheeling for some man or men? Yes.
1708. Who were they? Joe Lewis was the first I started with.
1709. Who were the others? Then I was wheeling for the company.
1710. You wheeled for Lewis for six months? Yes.
1711. And during a period of eighteen months you have been wheeling for the company? I have been a horse-driver between.
1712. How long is it since you commenced to work with Mr. Caldwell? Seven months, as near as I can guess.

1713. Working with him frequently, and doing what he instructed you to do in any part of the mine? Yes. A. Anderson. 27 Apr., 1900.
1714. Have you been frequently sent away down the dip, further down than where the accident occurred? No.
1715. You never have? No.
1716. On the day of the accident did Mr. Caldwell say anything to you about any rumbling noise, or any sough, or any sound of any kind? No.
1717. Did you fall down of your own accord when the explosion took place, or were you assisted down? Jack Caldwell told me to lie down.
1718. Did he say anything to you then? No.
1719. He did not tell you that the gas had been lighted? Yes; he said the gas was lit.
1720. By whom? He did not say by whom.
1721. Did he say what that gas was that was kindled? No.
1722. You never heard him express any fear about gas lurking about? No.
1723. And he never instructed you to be a little more vigilant in consequence of gas lurking about? No.

JOSEPH IRONS, miner, examined:

1724. *By the Chairman:* Your name is Joseph Irons? Yes. J. Irons. 27 Apr., 1900.
1725. You were working in Torbanlea Colliery at the time of the accident? Yes.
1726. In what capacity were you working at the time? We were in the top level of all.
1727. Were you working as a miner? Yes.
1728. How long have you been working in the Torbanlea Colliery? I could not say exactly, but it is very nearly twelve years anyway—from just before the Newcastle strike.
1729. Had you any other experience in coal-mining before that? Only in ironstone.
1730. Where was that? In Cleveland, in the old country.
1731. But no experience in coal-mining? Not before I came to Mr. Rankin.
1732. You were in Howard before you came to Torbanlea? Yes.
1733. How long were you in Howard? About two and a-half years.
1734. Then you have had about fourteen and a-half years' experience in coal-mining, and all in this district? Not quite fourteen and a-half years; about fourteen, I think.
1735. You have not had any experience of gassy mines—you have only had experience of the Burrum mines? I have seen a little bit of gas in ironstone.
1736. But not in coal? No.
1737. That was in the Cleveland ironstone? Yes.
1738. Where were you working on the day of the accident? I was in the top level in the dip.
1739. That was called Hamilton's level? No, William Warren's level. Hamilton's level is about 50 yards below that. Warren's level would be about 40 yards from the top.
1740. Did you notice on that day any gas at all in that level? I have never seen a bit. I had only been in that part three days—that was the third day, as I went in on the Monday.
1741. Were you one of the men who were removed from the workings on the left-hand side of the dip on the Monday? Yes.
1742. Was that from where the Houston's were working in what was known as Houston's level? I was higher up towards the engine; then I was in Warren's level at the top pillar.
1742A. Did you see any gas when you were on that side? I saw one little bit; it was in a hole in the floor, but it was not burnt; there was only a little bit of a flash.
1743. That was the third day you had been working on that side of the dip where the accident took place? Yes.
1744. Could you, if you wished, test open working places with a safety lamp? Well, I think so; they have never refused it.
1745. You could get a safety lamp, if you wanted it, to test the place? Yes.
1746. Where were the safety lamps kept? Hanging at the top of the dip.
1747. And you men were able to use them? I had one in one place where, as I told Mr. Glassey the other night, I lit the gas.
1748. What place was that? On the left-hand side going down the dip, the bottom place of all.
1749. Near the fault? Close to the fault.
1750. *By Mr. Glassey:* Close to the fault near the bottom of the dip? Yes.
1751. *By the Chairman:* Have you ever had any reason to make complaint to the manager of the existence of gas in the mine? Only that time; I reported that. It caught me down the back. I watched it go to the old fall, and the moment it got there I cleared out, and both I and the two lads got out.
1752. You reported that to the manager? Yes, and he stopped the working there.
1753. Did the manager encourage the men to report anything wrong or unsafe that they saw? He did with the gas.
1754. A man would not be afraid of making a report, or complaining, thinking a mark would be put against his name? No, if you had any suspicion he would tell you to take a lamp with you.
1755. And report gas directly you noticed it? Yes.
1756. The manager encouraged you to do that? He always encouraged us to report it.
1757. On the day of the accident you were working up in the level—what did you hear or see at the the time? It was just like a big fall.
1758. What did you feel? I felt the wind, air, and dust, and I said to the two lads, "Keep quiet, it is a big fall." I heard the biggest lad say, "It's gas," and I said "Keep quiet." Then the dust came again, and I heard the little fellow say, "I'm burnt."
1759. That is your son? Yes; of course the other one is not here. He saw the fire fly up the dip. The lad was just going to reach the door, but it went open; I heard the door fly open fit to smash it. The little boy dropped down, but the other happened to be a little bit too far in; he was reaching for a light, the wind having blown his out. I said: "Keep quiet now; it is gas right enough, but keep quiet and lie down." When it was over I went down; they had gone out into the dip. The others then came,

J. Irons. 27 Apr., 1900.

and came topsy-turvy over me. I said: "Take your time and you will get out all the quicker; make up to the airway or you will get suffocated." We made for the airway; there were seven of us, and Warren tried to get a light from one.

1760. Nine of you, were there not? Yes; he tried to get a light, but I said: "You will never carry a light; go up the airway on your hands and knees in the dark, and you will be right as soon as the air course is reached." We made our way to the top of the dip in the dark.

1761. Was the top of the dip in darkness at that time? Well, they had got a light at that time. Andrew Anderson was just in the doorway.

1762. Their lights were blown out, but when they got to the top of the dip they relighted them? Yes.

1763. At the time or just before the accident, did you hear any big noise? Never heard anything at all more than you.

1764. You only felt that rush of air? Only felt that rush from the gas.

1765. Do you know the position in the 100-yards level where there had been a big fall of roof? I was never in that part but I have worked in the level.

1766. Do you think that a large fall could have taken place in that level? I hardly think so. We were pretty well sure to have heard it.

1767. You were sure to have heard any noise caused by a fall? Yes.

1768. And you are sure you did not hear any noise? Yes, I am sure.

1769. Why did you say you thought it was a fall? Because it came upon me unawares.

1770. You thought at first it might have been a fall at a distance at which you could not hear? We might not hear it; it made such a rumbling noise.

1771. Suppose there had been a big fall in the 100-yards level, do you think it would have made a very different noise to what you heard? It would have made a different noise from that. What I heard was more of a rush or roar.

1772. How far would you be from the level you were in to the 100-yards level? I must have been about 100 yards from there. From the bottom of the dip up to there must have been that distance. I was the last one went into the bottom of the dip.

1773. In the bottom of the dip? Just where the fall was that I know of.

1774. I am speaking of a fall that is said to have occurred in the 100-yards level? We should have heard that.

1775. That is what I mean. How far were you from that? Forty or 50 yards.

1776. If a fall had taken place in that locality you must have heard it? We were bound to hear it if it was of any size.

1777. And are you sure you never heard it? I never heard any fall.

1778. Did you ever think it was unsafe to take out these pillars without the use of safety lamps? No.

1779. From what you know do you think there was not sufficient gas to necessitate the use of lamps? I do not think there was gas enough to hurt anyone where I was working.

1780. But did you ever hear any men express their opinion that safety lamps ought to be used? I heard Gambie say there was a good bit of gas in his level at one time.

1781. Where was his level? Lower down again; and they were stopped and brought up higher.

1782. How far would you be from where the Houstons were working on that day? I could not say, because I do not know exactly where they were working.

1783. At first you thought it might be a fall, but afterwards you knew it was gas? Yes; I knew that in a moment when the second report came.

1784. That was just in a few seconds? Yes.

1785. What was that report like? It is difficult to explain.

1786. It would be quite a different noise to anything made by a fall? Yes; quite different. It sounded more like rumbling thunder.

1787. But where it blew that door down you say it was violent? Yes; I believe it would have killed the lad if he had been behind the door and it had hit him.

1788. *By Mr. Fryar:* Which door was that; in the dip or in the level? In the level.

1789. *By the Chairman:* You have heard of no meeting of men on the surface to object to going down or of any discussion as to whether it was safe to go down? Never.

1790. And you were on the surface on the morning of the accident? Yes.

1791. And if there had been any discussion of that nature you would have been bound to have heard it? Oh, yes.

1792. That could not take place without you knowing or hearing something about it? No; and if there was any gas down the dip Mr. Sharp would not let us go down.

1793. Did you assist in rescuing any of the men? No; I did not go down. They had not got safety lamps enough.

1794. Did you assist in taking the injured men to the surface? Yes.

1795. Who was the first you assisted? Johnstone.

1796. Did he seem to be very badly injured? I did not go to the pit bottom with him.

1797. Did you wrap him up in anything? Yes; in a few clothes that happened to be there.

1798. You did not go to the surface with him? No.

1799. Was he sensible at the time? Yes.

1800. And who else did you assist? Jack Houston, the boy, next.

1801. What state was he in? He did not seem bad, but he would have nothing on him. All he wanted was a drink. I gave him a swallow, and he said, "Let me have some more." I said, "You have had plenty, Jack," and he said, "I will hold the next in my mouth." I said, "No, I will not give you any more," and he then said, "My mouth is burning." I then gave him another swallow, and he said, "Let me have one more." He would have emptied the billy if I had let him. We put him on the wagon, and someone started off with him. I returned again into the airway, and brought Sandy Houston out. Sharp wanted to carry him, but he would not be carried.

1802. Was he walking? He was on his hands and knees.

1803. Did he walk all the way to the shaft? No, he was put in the wagon.

1804. This was bringing them up the dip? Yes.

1805. Do you know if anything was brought down to the bottom of the shaft to wrap these men up in? I did not go to the bottom. There were blankets when Griggs came out, and he was the only one I went to the shaft with.
1806. Did you know at the time who had fired the gas? No, I did not; I heard afterwards.
1807. Are you able to give any opinion as to how the explosion occurred? No, I could not.
1808. *By Mr. Fryar:* Was the room where you were working in the upper level?—There were nine of you; were you furthest away from the dip? Closest to the dip.
1809. When you went out you went out up the dip? Yes.
1810. Have you an idea how far you were from the dip? It might be 10 yards.
1811. On the right-hand side? Yes.
1812. Was there a pillar of coal alongside? Yes.
1813. And on the other side was there a fall? No fall on that side when I came up on Monday; only lower down, and that had been down for a month.
1814. There were some little pillars between you and the fall? Yes.
1815. But there was an airway that went down next to a pillar of coal and below where you were working? Yes.
1816. We have had it represented to us that a fall had taken place in a room from the next level extending upwards towards your level. If a fall had taken place in that airway while you were working there, would you have heard it? I think we should.
1817. Some witnesses have spoken of a fall 25 yards in extent. If a fall anything like that size had taken place would you have been likely to have heard it? I think so myself, because these rooms go up into that level of Warren's.
1818. And if a fall had taken place to that extent, you were bound to have heard it? I think so, especially Warren. He was there against the mouth of the airway, and he would have a better chance of hearing it than I had.
1819. *By Mr. Glassey:* I understood you to say you were twelve and a-half years in the Torbanlea Mine—is that correct? No; not twelve and a-half years in the Torbanlea Mine, but between the Torbanlea and the Burrum.
1820. You would be ten years in the Torbanlea Mine? Yes; I was here since the Newcastle strike. I think I am the oldest man who has been here, barring Salter.
1821. How long have you been in this dip working? It is two years last March since I started, after having my knee bad—about one year and eight months.
1822. *Previous to going into the dip workings, did you ever discover any gas in your working place?* I never saw any worth speaking of in the dip.
1823. But before you came to the dip? I saw some nine or ten years ago.
1824. Where was that? In the horse level. John Madders got burnt in that a little bit.
1825. So that ten years ago, in that particular part, you saw a quantity of gas? It might be between nine and ten years ago.
1826. Did you ever see gas in that part of the mine after that time? I never saw any—only in that one level.
1827. Was that about the time Madders was burnt? About the time.
1828. How often did you see gas at that time? You could burn it continually—keep it alight all day.
1829. But did you see from time to time any quantity of gas? No. It just singed my hair that night and made me tumble backwards.
1830. When you commenced working in the dip, some twenty months ago, did you discover gas then? I never saw any to burn or cause any injury.
1831. In the neighbourhood of where you were working in the dip at that particular time—twenty months ago—did any of the other men, to your knowledge, strike gas at any time? I never heard them say anything about it until those falls began to go.
1832. You worked at the bottom of the dip for a time? Yes.
1833. Did you discover gas there? That is the one John Sharp stopped.
1834. How often did you see gas there? Only the one time.
1835. Were you working the pillars all that time in the dip? I was at the boards and at the pillars, too.
1836. How long is it since you were taking the pillars out? About five months.
1837. In working the whole coal I suppose you used blasting powder? Yes.
1838. Always? Always compressed powder.
1839. In taking out the pillars had you ever any occasion to use shots? Yes.
1840. Right up to the time you were removed from that particular part? Right up to the last week I came out of the pit I have been using powder.
1841. Do you know whether the men generally in taking out the pillars down the dip used blasting powder? Yes; the coal stuck to the roof too much, and we could not get it away from the roof.
1842. Were shots fired on the day of the accident to your knowledge—did you hear any fired, or did you fire any yourself? Oh, yes, there were shots fired then; I fired one myself.
1843. On the day of the accident? Yes.
1844. Taking out a pillar? Yes.
1845. Is it a usual practice for men to fire shots when taking out a pillar? It was there.
1846. If gas were lodging about those pillars in the waste would the vibration or concussion of the shots not force the gas out? It could not where we were, but lower down where the Gambies were I could not say anything about.
1847. Did they fire shots? I think they must have done, because they had the boring tools with them. I know Houston did.
1848. Did you hear any shots below you on the day of the accident? I did not hear any.
1849. Did you only fire one shot that day? That I could not say.
1850. At any rate you were accustomed to fire shots from time to time in taking out the pillars, just the same as when working the whole coal? Yes, just in the same way.
1851. It is not improbable that the concussion from the shots may have forced gas out? I do not think it could where we were, or where Warren was, because we were away from the gas altogether.
1852. There was too much air? Yes.

J. Irons. 27 Apr., 1900.

1853. Was there much excavation around were you were working? There were Warren, Ambler, and another man there— three places going up along the wall, and I was taking a strip up nearer the dip.
1854. Do you mean to say you were taking a strip of coal off each pillar? Off a head rib of coal.
1855. Was that along the main airway? It was not in the airway; about 6 or 8 yards were left.
1856. You are not sure whether the men working below you fired any shots that day? No, I could not say anything about them. I know I had my own tools, but how many shots I fired I could not say.
1857. At that particular part of what you call the last place at the bottom was there a considerable quantity of gas? I never saw any, only on that one day.
1858. Was the roof brittle, or was it hard? It was all full of slips. When I lit the gas I was picking a lump of coal up, and as I was turning round there was a fall, I dare say 10 yards lower down.
1859. How long was it before you were removed after you saw that? Mr. Sharp never let me go in any more; he stopped me there and then.
1860. How long was that before the 21st of March? It must have been two months before that.
1861. So that two months before the 21st of March you saw a quantity of gas there which really ignited? Yes.
1862. And there was a danger of shaking the brittle roof there? No, there was not in that fall.
1863. The ground was bad there? The ground was bad.
1864. Did you ever see gas prior to that day when it kindled? I never saw it fire.
1865. Did you know that gas existed prior to that time, but did not explode? No.
1866. What was the roof like? It was full of slips.
1867. Did you think there was a likelihood of the ground standing after you came away from there? No, that all came down. I went higher up and started another place.
1868. Was there not a considerable quantity of gas in the neighbourhood of where those falls took place? I could not say anything about that.

THOMAS IRONS, filler and wheeler, examined:

T. Irons. 27 Apr., 1900.

1869. *By the Chairman:* What age are you? Nineteen the 24th of this coming August.
1870. You were down the Torbanlea mine on the day of the accident, the 21st of March? Yes.
1871. Where were you working? About 30 yards down the dip.
1872. In the level? Yes, about 10 yards off the dip, in the level.
1873 On the right-hand side going down? Yes.
1874. Who was nearest to you at the time of the accident? My brother.
1875. When the explosion occurred what did you hear? I never heard much in the first report; I saw the door fly open, but I never heard much.
1876. There were two reports? Yes. It was the second one that burnt me and knocked me down. I was down on the low side of the wagons going to go back to the face when the door burst open.
1877. Was the door blown open violently? Yes, it came right back.
1878. That was with the first report? Yes.
1879. What was the time between the first report and the second? It could not have been above six or seven seconds, because I only just got back 2 or 3 yards when the second report came.
1880. Which way were you going? Going in towards the face of the level.
1881. Did you see the flame coming? I only saw a bit. I had my head down when I saw it; but you could hardly tell what it was for the dust and smoke and stuff.
1882. Where were you burnt? On the back; I was barefooted; and I got all the hair taken off.
1883. What are your duties down the mine? I was filling and wheeling for my father.
1884. How long have you been in the colliery? Four years last Christmas.
1885. And during that time what different kinds of work have you done? Working in the face—filling and wheeling.
1886. Always working with your father? Yes; all the time.
1887. At the explosion or just before it did you hear any noise? No; nothing at all.
1888. Have you ever heard the noise made by a falling roof? Yes, but not a very big fall.
1889. You did not hear anything of the sort at that time? No.
1890. You know the 100-yards level—the level below? It must have been Hamilton's level. I think I have heard that is about 100 yards down.
1891. You know there had been a fall in that level? No; I did not know that there had been. I never went down for a long while.
1892. At any rate, you did not hear any noise at the time or just before the explosion? No; I never heard anything.
1893. And after the explosion what did you see? If we had gone up the air course we would have been all right, but instead of that we came through the door and went up the dip through the after-damp.
1894. Coming up the dip? Yes,
1895. What effect had that on you? It was just like being choked. Like breathing fire all the way up.
1896. Had you great difficulty in getting up the dip? I do not know whether the others went down, but I went down four or five times before we reached the top.
1897. Did you get up yourself without any help? Yes.
1898. *By Mr. Glassey:* You mean you fell down? Yes.
1899. *By the Chairman:* When you reached the top of the dip had any of the men who had been injured got up? Gambie was up. I heard them say he was up, but I did not see him.
1900. While you were working in the dip did you hear any of the men speaking of finding much gas? No; I never heard any of them complaining about it.
1901. Never at any time? No.
1902. *By Mr. Glassey:* Were you severely burnt? Well, I did not feel it much at the time. I went over to the doctor, and he said if I had been burnt on the bowels instead of on the back it would have finished me.
1903. How long were you off work? About two days. I went to work as soon as the pit started again, and the next day after that I stopped at home.
1904. The burning was not very severe when you were able to go to work two days after? Oh, no.

T. Irons. 27 Apr., 1900.

1905. Was your brother working with you the same day? Yes; he was about 3 or 4 yards off.
1906. Was he burnt? No; he was just out of reach of it. I believe if I had been 6 or 7 feet further along the level I would have been out of it. I think I was nearer the door than he was.
1907. Speaking of these 30 yards lower down, does that mean 30 yards lower down than where the explosion took place? No. If Houston was working where I thought he was, we would be 40 yards higher up.
1908. In working with your father or your brother, how often have you seen gas in that neighbourhood? We never saw any in our level.
1909. When you were at the bottom of the dip, did you frequently see gas? No; we saw one or two bits of gas, but nothing worth speaking of.
1910. Before the explosion occurred, were you expecting any danger arising from gas? No, we were not thinking of any danger.
1911. And when it came, were you rather surprised to hear the sound to which you have alluded? Well, the door flew open first, and when it was open it entered my mind that it would be caused by the gas, or else a fall might have opened it. I heard them say that the door went open once before, but that was lower down. It entered my head that it was gas as soon as the door came back.
1912. So that you were not surprised that there was an explosion? No; I expected that was what would follow. That is what made us try and get back to the face.
1913. You say a door was left open some time before this explosion? No; not where we were. The force of the fall opened the door.
1914. I understood you to say that at one time before a door was left open? No; I heard some time before that there was a big fall, and that a door was opened by the fall.
1915. How long was that before the day of the explosion? About two months.
1916. So that a fall occurred and a door was forced open two months before the explosion occurred? I do not know that of my own knowledge.
1917. *By Mr. Rankin:* Do you know anything about that fall that occurred near the return air course that was going towards the dip? I did not hear anything about it.
1918. You have heard since that there was a fall there? I forget where the fall is. If I remember rightly, they said it was on the right-hand side going down. I never saw it, and I know nothing about it.
1919. You went on to work again after the pit started, and you stopped at home the next day. Why did you stop at home the next day? Did you feel you were not all right for work? Yes.
1920. *By Mr. Fryar:* Where was the door that you speak of? Just off the dip—about 4 or 5 feet off the dip.
1921. In the level in which you were working? Yes.
1922. On which side were you? On the level face side.
1923. You were inside the door? Yes.
1924. Was there an airway going down to the dip there anywhere near where you were? There was an air course right opposite where I was.
1925. The door was between the dip and the air course? Yes.
1926. Were you down that air course? No.
1927. If there had been a fall in that air course, would you have been likely to hear it? I think we would.
1928. A big fall, 20 yards square? Yes; we would have heard it if there had been a big fall.
1929. Did you hear any? No, I never heard any.

JOHN AMBLER, miner, examined:

J. Ambler. 27 Apr., 1900.

1930. *By the Chairman:* What age are you? Nineteen on the 18th of May.
1931. You were working in the Torbanlea Colliery on the day of the accident? Yes.
1932. How long have you been working there? Nearly five years.
1933. What did you do in the mine? I am working at the Burrum on the coal now.
1934. What were your duties in Torbanlea? I was working with my father on the coal.
1935. Where were you working on the day of the accident? Down the dip.
1936. How far down from the level? About 40 yards, I think.
1937. In the level on the right-hand side? Yes, on the right-hand side going down.
1938. How far in that level were you? About 25 yards.
1939. You were further in than Irons? The next place to Irons, further in.
1940. When the explosion took place what did you feel or see? I felt as if I was deaf from the sudden noise.
1941. Was there a rush of air? I did not feel any air.
1942. What sort of a noise was it? Like a rumbling noise.
1943. Have you ever heard the noise made by falls of roof? No.
1944. You could not say whether that would be the noise made by falls of roof? No.
1945. Could you see any flame at all? No.
1946. Your light was put out, I suppose? My light was put out when I was going up; it fell off my head.
1947. It was not put out by the explosion? No, my light was not.
1948. While you have been working there have you seen any gas at all? No.
1949. Never at any time? No.
1950. How long were you in that working place? About a fortnight, nearly three weeks.
1951. Where were you before that? Up above, on the main level.
1952. What were you doing there? Working on the coal.
1953. Did you have any idea where the explosion occurred? No, I had no idea. I knew nothing down there, as I did not go about.
1954. I suppose you were pretty dazed at the time? Yes.
1955. *By Mr. Glassey:* You were working with your father? No; Richard Foith was working with me; he is my mate.
1956. Did you fire any shots on the day of the accident? No.

J. Ambler. 27 Apr., 1900.

1957. Did you fire any shots the day before? No; none that week.
1958. Did you fire any shots the week before? Yes.
1959. It was your usual custom to fire shots when taking out the pillars? We were accustomed to fire shots down there; it was like driving in a room, and you had to use powder.
1960. Were you taking out pillars at the time the accident occurred? No.
1961. You were on whole coal? Yes.
1962. You say you never saw gas in the places where you were working? No.
1963. When you heard of the explosion were you surprised that the explosion took place? No.
1964. You were expecting the explosion? No.
1965. Did you hear, or did you know, that there was gas in the dip workings? I heard that there was a little gas, but not what you would call very much.
1966. At any rate, when the explosion did take place you were not surprised to hear it? My word, I was; it surprised me a bit, I can tell you.
1967. Did you never hear the men talking before the day of the accident about gas having been seen in the dip workings from time to time? No.
1968. Never heard of it? No.
1969. *By Mr. Rankin:* Did you know there was gas in the mine at all? Yes.
1970. Did you ever see it? No.
1971. Neither in the dip nor anywhere else? No.
1972. And you have never seen gas in all your experience? No.
1973. You would not know it if you saw it? No.
1974. *By Mr. Fryar:* In coming out from your room to the dip, would you pass any air course? You would pass the main air course that went down to the bottom of the dip.
1975. Have you ever been down that air course? No.
1976. You have never been down from your level to the next level? No.
1977. How far was your working place from the top of that air course where you passed it? About 15 yards.
1978. If a large fall took place in that air course between your level and the level below, would you have been likely to hear it? No; I should not think so.
1979. Did you hear anything like a large fall? No.

RICHARD FOITH, miner, examined:

R. Foith. 27 Apr., 1900.

1980. *By the Chairman:* Were you working in the Torbanlea Colliery on the 21st of March, the day of the accident? Yes.
1981. You were working in the dip workings, I believe? Yes.
1982. In which level? About 40 yards from the dip in the first level.
1983. How far were you along the level from the dip? About 20 yards, or it might be less.
1984. How long have you worked in that place? About three weeks; before I used to wheel for the company. I was five years wheeling for the company.
1985. Did you see any gas while you were there? No; I never saw any gas since I worked for the company.
1986. Will you tell us about this accident—what you saw and felt? I felt a shaking at the time the explosion took place, and the door flew open.
1987. Did the explosion seem a violent one? No; the man next to me smelt the gas, and the door flew open. He said, "Foith, the gas is on fire; drop your tools and clear as quickly as you can." That is all I know about it. I never saw any gas at Torbanlea. I never had a chance to see it.
1988. Have you any idea where the explosion took place? No; I never saw any further than that level.
1989. And you had been only three weeks in the dip? Yes; that is all.
1990. *By Mr. Rankin:* You never saw gas there? No.
1991. Nor anywhere else? No.
1992. You would not know it if you saw it? No; I never had a chance to see any gas.
1993. *By Mr. Fryar:* Did you hear anything like a big fall before the door flew open? No.

WILLIAM WARREN, miner, examined:

W. Warren. 27 Apr., 1900.

1994. *By the Chairman:* You were in the Torbanlea mine on the day of the accident? Yes.
1995. Were you working in the dip workings? Yes.
1996. Whereabouts? In the level on the right-hand side going down the dip.
1997. How far in the level were you? Right in the end.
1998. How far would that be from the dip? From 30 to 40 yards.
1999. How long have you been working in the dip workings? Close on two years.
2000. How long in the level you were working in that day? I could not tell you how long.
2001. How long have you been coal-mining? I have been eight years at Torbanlea, and I was mining another three years before that.
2002. Where was that? In the old country.
2003. On coal? No, on iron, in Somersetshire.
2004. Did you meet with any gas in the top level? No.
2005. You would know gas if you saw it? Yes; I have seen gas in this pit.
2006. In what other parts of the mine have you been working? In Hamilton's level, and in the level opposite.
2007. Is Hamilton's level the same as the 100-yards level? Yes.
2008. Have you met with any gas in either of those places? Never while I was working there.
2009. Have you, yourself, ever met with any gas in the dip? Yes, a little, but nothing to hurt. In the right-hand side going down the dip I was taking a pillar out, and met with a little.
2010. Was there much there? Nothing to hurt.
2011. From what you know of the dip workings, would you think it necessary to use safety lamps? I would not.

W. Warren. 27 Apr., 1900.

2012. Not even in taking out the pillars? No.
2013. What was your feeling at the time of the accident?—What did you hear or see? First there was a grating sound, and then came a rumble. There were a few seconds between. Then there was an explosion. I was lying on my side at the time, and it knocked me right over, though I was right at the end of the level.
2014. It came right up from the dip? Yes, the big fall was right under me. I drove the level right along.
2015. Had you any idea where the explosion had started? No, I could not tell a bit.
2016. How long had that big fall existed? About six weeks or two months.
2017. How far would that fall be from you? I should think it would be 10 or 15 yards.
2018. Was there any solid coal between you and the coal? Yes, a little pillar was left up.
2019. If there was any noise in the locality of the fall, how far would the air have to travel to come to you? The air would be going away from me. I was in the down cast.
2020. How far would it be to the fall the way the air would have to travel? About 10 or 15 yards.
2021. Before the accident occurred, did you hear any noise like a fall? Just a grating sound, and then there was a clash, and then the explosion a few seconds after.
2022. What time was there between the grating sound and the clash? Just a few seconds; it could not be very long.
2023. When you heard the clash what did you think it was? The first or second one?
2024. The first one? It sounded to me like a fall: I could not say what it was.
2025. You did not take any very great notice of it? No; I have heard so many falls that I did not take particular notice of it.
2026. Did it sound like a very big fall?—Suppose it was a fall of 22 yards square, would it have made a bigger noise than the noise you heard? Certainly it would.
2027. You are sure of that? I am sure of it. I would have heard a bigger sound.
2028. What sized fall do you think it was? I could not say what size it was.
2029. But still you think it could not be very big? Judging by the sound, it could not be very big.
2030. Did you feel any rush of air? No; not until the explosion.
2031. Was your light put out by the explosion? Yes; I was in the dark.
2032. What did you do then? I went to where my son was working; he was right close up to the face.
2033. Was he below you then? Yes; we were chucking the coal on the level.
2034. *By Mr. Glassey:* How long have you been in Torbanlea altogether? Eight years—going on for nine years.
2035. Where have you been working all that time? At the Torbanlea pit.
2036. In what part of the mine? In the Burrum seam, and I was also on the Torbanlea seam.
2037. Did you discover gas in the mine when you first entered it? I saw a little gas four or five years after I went there. That was in the Burrum seam.
2038. Before that you never discovered any? No; never before that.
2039. Have you seen gas frequently during the period mentioned? Yes; I have seen gas two or three times since then.
2040. Two or three times only? That is all.
2041. Was there any quantity? No quantity.
2042. Where did you usually find it? Generally in the roof after there had been a bit of a fall, or in the corners where the air could not drive it away.
2043. During the time you have been working in the pit, how often have you seen gas? Only about twice or three times.
2044. Did you work near the bottom of the dip? No; always higher up. The Hamilton level was the lowest level I was in.
2045. Have you been taking out the pillars at all? Yes.
2046. How long were you at that? I was taking out pillars in the Hamilton level, and Mr. Sharp asked me to drive this other level then. I was only for a week taking out the pillars.
2047. During the time you were taking out the pillars did you fire shots? Yes.
2048. And, generally speaking, you used powder? Yes.
2049. Have you ever noticed a flare of gas after a shot was fired? No.
2050. When you heard this noise just preceding the explosion, you say it occurred to you that it was a fall? Yes, it was just like a fall.
2051. You had frequently heard falls? Yes, very frequently. It was just like the noise of a fall.
2052. And then after that there was a rush of air and smoke and dust? That was after the explosion.
2053. How long was it from the time you heard the grating sound until the explosion? A few seconds only.
2054. Do you consider yourself a fair judge of gas? No, I have not had much experience.
2055. In mixing with the men, have you ever heard them discussing amongst themselves that they apprehended danger from gas accumulating in the mine? No, I never did.
2056. When that explosion occurred were you surprised, or were you expecting it? I did not expect it I was a bit surprised, and did not know what I was doing for a few minutes.
2057. It did not reach you at all? No, it did not reach me.
2058. *By Mr. Rankin:* Where you were working you were inside the main air course? The air course was outside of me.
2059. You started with an open end of the pillar? I started with the solid coal first.
2060. You would not readily see any of the gas that was down were the Houstons were working? I was a long way above that, and on this side of the air way. I do not know exactly where the Houstons were working.
2061. *By Mr. Fryar:* Did the air come in past you? Yes, that was the down cast.
2062. Did you assist at all in getting the men out? No, I never went down. When I came up first we went up the air course. I was about done when I got up to the top. Somebody shouted out, "Up the air course," and we scrambled up in the dark. When I came up I volunteered to go down again, but found I could not.

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2063. Go down the dip? No, back the same air course that I came up. Johnstone was the first to come up, and I took him to the pit mouth.
2064. Did these men come up the air course? Yes, they all came up the air course.
2065. Do you know where they got into the air course? In the same level where I was.
2066. If there had been a very big fall in the air course, between your level and the one below, would you be likely to hear it? I think so. I heard the last big fall that came down. I am pretty sure I would hear the other one.
2067. *By Mr. Glassey:* Do I understand you to say that the men who were burnt were taken up the main air course? Yes.
2068. Not up the dip? Not right up the dip. There was a door across the dip, and my door was just above the door in the dip, and they brought the men through those two doors into the air. That is what I was told afterwards.
2069. *By Mr. Rankin:* You did not see them there? No.

WILLIAM JONES, miner, examined:

W. Jones. 27 Apr., 1900.

2070. *By the Chairman:* You were working in the Torbanlea Colliery on the day of the accident? Yes.
2071. How long have you been working there? About nine years.
2072. Have you ever worked in coal-mines anywhere else? Yes, in Wales.
2073. South Wales? Yes.
2074. Which part? Near Merthyr Tydvil, in the Merthyr Vale Collieries.
2075. You had plenty of gas there? Yes, there was a lot of gas there.
2076. How long have you been working in the dip workings in Torbanlea? About twelve months.
2077. Which part? I was working in Kerr's level the biggest part of the time.
2078. Which level is that? The middle level on the left-hand side of the dip going down.
2079. How long were you working in that level? I only finished there the week before the accident happened.
2080. Did you see gas while you were working in that level? No, never any worth speaking of; I have lit a little gas there with a light in the corner.
2081. How often have you seen any trace of gas? I do not think more than two or three times. I never fired many shots either.
2082. That is in about twelve months? Yes.
2083. What other part of the mine were you working in before that? The level the engines are on—the dip level.
2084. Did you ever see any gas there at all? Yes, I have seen gas in that level.
2085. In the level the engine is on? Yes.
2086. How often? I was driving there at the start, and you could see it there every day.
2087. Did you see very much there? Yes, there was a good bit of gas there.
2088. Was there any explosion at all? That is the place where Keene was burnt.
2089. That was in 1896? I could not say that it was.
2090. Were you there at the time? No, we were not out that day.
2091. So that you only know from hearsay what happened then? That is all.
2092. On the day of the recent explosion you were working in the top level in the dip?—How far were you in? I was working just on the side of the dip, on the right-hand side.
2093. When the explosion occurred, what did you feel or see? I was not down there when the explosion occurred.
2094. Where were you at the time of the explosion? Outside of the stone drive.
2095. I suppose you heard nothing at all? We never heard anything, but we felt the rush of air.
2096. What did you do then? We were in the dark, looking for matches, and we heard someone coming up. We did not know what had happened, whether it was a fall or what, and as soon as we got a light we went back.
2097. What were you doing? I was doing nothing at the time; I was standing right in the middle of the road when the first bit of a rush came.
2098. Then, except what you have heard, you really know nothing of what took place when the accident occurred? No, nothing.
2099. Did you assist in rescuing any of the men? No, I never went down the dip.
2100. Did you assist in taking them to the pit? No; all I did was some running about looking for a little water, or anything like that.
2101. Just assisting generally? Yes.
2102. Did you ever think at any time while you were working in the dip that it was dangerous to work there with naked lights? No.
2103. You never felt afraid of gas yourself? No.
2104. You preferred working with a naked light to working with a safety lamp? Yes; simply because I have never seen any gas there worth speaking of.
2105. *By Mr. Fryar:* When you were firing a shot the gas lighted? Yes; just in the corner in the rib side.
2106. Did the gas light when you were putting your light to the shot—what did the gas light from? When I was putting the lamp up to light the fuse.
2107. Then the gas lighted? Yes; just a little. It was lit before the shot was fired.
2108. *By Mr. Glassey:* You have been about one year in the dip? Yes.
2109. And during that one year how often do you think you saw gas? I do not think I saw it more than three or four times anywhere there.
2110. How long is it since you came to the engine level? I was there pretty nearly at the starting of the level, but I could not say exactly when.
2111. You saw gas in considerable quantities in the engine level from time to time? Yes; that is the vapours from the bore-holes of the shots.
2112. Is that the only time you discovered gas when you fired shots during the time you were in the engine level? The gas was coming out of the bore-holes.

W. Jones. 27 Apr., 1900.

2113. Was that the only time you discovered gas? Oh, no; there is gas there as a constant thing, but it is accumulating from the bore-holes.
2114. So that you frequently saw gas at other times as well as when you lit it when lighting your fuse? Yes; it could put your light right out.
2115. That is higher up the dip than the place where the explosion occurred? Yes; further up.
2116. From that time onwards you have seen gas from time to time? Yes; a little.
2117. But more particularly in the engine level? Yes.
2118. On the day of the accident did you hear any sound of a fall prior to the accident? I never heard any sound at all, more than the current of air forcing the air back.
2119. What distance were you from where the Houstons were working? I could not say exactly; we were just on the outside of the stone drive.
2120. You were about 200 yards or more away from where the Houstons were working? Yes.

(Howard.)

WEDNESDAY, 2 MAY, 1900.

PRESENT:

Mr. RANDS | Mr. GLASSEY, M.L.A.
Mr. FRYAR | Mr. RANKIN
Mr. THOMAS.

MR. WILLIAM HENRY RANDS, CHAIRMAN.

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JOHN SHARP, manager Torbanlea Colliery, recalled and further examined:

2121. *By Mr. Glassey:* I availed myself of the opportunity of reading carefully the whole of your reports contained in the book you left with the Commissioners, and I find in the course of your weekly reports you frequently mention a considerable quantity of gas that is given off from some break in the roof, and also a considerable quantity given off a fall. Sometimes you mention the foot of the dip, and sometimes other parts. I suggested the desirability of calling you again to give evidence with a view of clearing up some points in connection with these matters. Now you have your report book in your hand. On page 80, on 30th October, 1899, you say: "On working the place in dip, where stoops are being worked out, a quantity of gas is leaking from breaking roof." Have you the plan here so that we may ascertain where this break was? The sketch plan is here.
2122. Point out where the break was? That was before any falls had occurred right at the very foot of the dip.
2123. At the bottom of the dip itself or which side? Right at the bottom of the dip. Before there was any fall the roof was cracked, and from that crack a quantity of gas was issuing.
2124. That is the break to which you refer? Yes.
2125. And that is the break to which you refer right along? No; afterwards it was a fall.
2126. That report was dated 30th October? Yes.
2127. Now, on page 81, 9th November, you say, "A quantity of gas is still issuing from break in roof where pillars are being removed"? The same break in the roof.
2128. To what extent were the pillars removed? There were none taken out. We were removing the pillars. That was an indication of the fall—the breaking of the roof.
2129. Where were these pillars situated? At the bottom level next the fault.
2130. What is the distance from where the pillars were being removed to the main road of the dip? [*Witness, by means of the sketch, pointed out the distance from the pillars to the main road.*]
2131. Now, is this gas which is given off not liable to accumulate in these old workings when the pillars are being removed? It would have been, but the return airway was there.
2132. After you took these pillars out, how could you ventilate the old workings where the pillars were removed, more particularly when falls take place? After falls had taken place I could not expect to carry the air over the fall.
2133. So that, when the pillars are removed and falls take place, I presume you will agree that considerable quantities of gas may accumulate there? If there is a hole to accumulate in, but I do not think there could be much of a hole; the fall was not thick enough.
2134. We now come to the beginning of the year. On page 83, 3rd January, 1900, you say—"Colliery started working after being idle for a week. Places all examined and found to be clear of gas as far as could be seen." How far were you able to see? Hold on. Put in a stop there at the end of the word "gas." It then reads, "As far as could be seen, the roads are in good order."
2135. Had any falls taken place then? Yes; the one at the bottom of the dip.
2136. Were you able to see right round that fall on the morning you examined the mine after it being idle a week? On the top side of it and on the dip side as well.
2137. Were you able to see round the bottom of the fall? No.
2138. Would gas not accumulate there? I do not think so, for the reason that the fall was not thick enough.
2139. What would be the thickness of it? About 6 feet, tailing up from a foot or so from the outside.
2140. That is to say as far as you could see? There is no difficulty in seeing right over the fall. You could crawl on top of the fall for that matter.
2141. So that you were not able to see all along the fall? No, not on the lower side.
2142. Therefore you were unable to examine it? Not the lower part.

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2143. What area would the lower part which you were unable to reach cover? Twenty by 60 yards.
2144. So that the Commission will see there was a considerable area which it was impossible to examine, and therefore, of course, a considerable quantity of gas might have accumulated there? I do not think so. I do not think a considerable quantity could accumulate there, because the rise in the workings is 1 in 3½. Twenty yards from the bottom means a rise of 30 feet, so that no gas at all could lie in the bottom side. The cavity at the top side could not have been more than 3 feet, so that there could not be much gas lying against the brow of the fall. There was nothing in the low side; that was seen by the fact that we got right down into the bottom of the dip, and no gas was found there.
2145. At any rate, in that part which you were unable to examine are you able to say that there was no gas? I could say that I believe none could accumulate. I could not possibly examine the lower airway, but the nature of the gas being lighter than the ordinary atmosphere, it could not accumulate.
2146. Over the whole area? Over the whole area.
2147. What depth would the brow where the break was be? Not more than 3 feet in depth.
2148. And covering what area? Nine yards back at the outside. On the lower side it was tailing out to nothing, and I had the whole strength of the fan playing on that portion as well.
2149. Would the air coming from the fan be able to reach right over the fall and into the cavity? No.
2150. Well, in the part which you could not examine, and which the air could not reach, is there any possibility of a considerable quantity of gas accumulating there? No.
2151. Is there a possibility of any lodging there? Only at the top side, where the fall caused a cavity. Lower down, of course, being so much lower than the level of the roof, the gas could not lodge there.
2152. That particular part of the brow is 18 yards long? All that.
2153. And what width? Running out to about 9 or 10 feet.
2154. Was there not room for a considerable quantity of gas there?—Is it not probable that a considerable quantity of gas lodged where the air could not reach? Not unless there was something to dam it back from getting out.
2155. But you have told us that there was a considerable area which you were unable to examine and which air could not reach. Is it not likely that a large quantity would lodge there? It was not necessary for the air to reach the lower portion to turn the gas out; it would go out of its own accord. It would go to the highest part.
2156. But the gas does not always come out; it sometimes lodges in the old workings? Yes, if there is something to hold it in; the gas goes to the highest part unless there is something to hold it in.
2157. Do you think the whole of the gas which had probably accumulated in that particular part would make its way out there notwithstanding that the air would not play upon it? Yes; I am satisfied it would make its way up to the highest part.
2158. On page 84, 20th January, 1900, you say, "Gas off fall at foot of dip is becoming very troublesome, and requires a lot of care to keep place clear"—what fall is that? The fall at the foot of the dip—still the same fall.
2159. The fall which you make reference to with regard to the rent? Yes; only on the other side of the dip. It is Lewis's place that I referred to as the place where I had difficulty in keeping it clear of gas.
2160. The break to which you previously made reference was on the right-hand side of the dip going down? That is the first break.
2161. Yes; there was a considerable fall there? Yes.
2162. And when you say in your report, "Gas off fall at foot of dip becoming very troublesome," you refer to another fall? This was a second fall.
2163. At the left-hand side of the dip going down from the shaft? Yes.
2164. Why did it become very troublesome—was there so much of it? No; and as I mentioned before the whole current of air was carried into that airway to clear the places of gas.
2165. You took an extra quantity of air into that particular part? Yes; the whole current was kept on.
2166. You simply turned the whole current of air on there? Yes.
2167. When you turned the current on that part did you weaken the ventilation on the other side? No; the whole current was on the other side.
2168. That is the particular place that caused you a lot of trouble and care to keep clear of gas. What area would that fall cover? Ten yards by 20 yards.
2169. I presume you stripped the fault going down there to the left of the dip? On that level at the foot of the dip?
2170. Yes? Yes, we stripped the fault there.
2171. Were you able to examine round that fall on the left-hand side at the bottom of the dip? No, only just on the dip side of it.
2172. The top side as you go up the dip? Yes.
2173. And close to the side of the dip itself? There was a pillar of coal between the dip and the airway.
2174. What area of ground would you be unable to examine round that particular fall? Ten yards by 20 yards.
2175. About what thickness would the fall be? It would not be very thick there; it was dropped out pretty thick just on the edge of the fault.
2176. Did any of those falls reach the little seam of coal that reference has been made to sometimes? No, not by many feet.
2177. Do you think there would be any gas come from that little seam of coal down there? I do not think so: I think that any gas that was coming out there came from the fault.
2178. Do you think that any quantity of gas would accumulate there on the left-hand side of that cavity which was created by the fall? I cannot see how it could; very little gas could accumulate there; even though gas was issuing continually, no body of gas could accumulate there.
2179. And there was a portion of that fall that you were unable to examine? Yes, the bottom portion.
2180. How much would you be unable to examine? I could not get along the bottom of the fall, but I could go alongside and on the top.
2181. What portion of the fall, to which you have previously made reference, were you unable to examine? Only the length of the fall, 10 yards—I could not examine that portion. I could get along

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the top of it, but, of course, I would not endanger my life by going over the fall, because the stones were hanging loose there. But there was certainly plenty of room for the gas to get off; there was nothing to keep it lodging there.
2182. Could the ventilation reach over the whole of that fall, and round that fall? The ventilation, when I put it on first, was going over the whole of it, but it got rather choked, and then went over the edge.
2183. What depth was the thickest portion of the fall? It might be 10 feet on the low side.
2184. Was the air able to reach into that cavity, 10 feet deep? No.
2185. Was there not a likelihood of a considerable quantity of gas lodging there? Well, I cannot see how it could; very little gas could have collected there, seeing that the cavity was above the level of the top side of the fall.
2186. Gas being light, and lodging in the highest part, was there not a likelihood of a considerable quantity of gas lodging in that big cavity? No, I do not think so; the explosion itself shows that there was no gas lodged there. I do not think any body of gas could collect there.
2187. Do you mean to say that, in a place which you were unable to examine with a safety lamp, and where a cavity 10 feet deep existed, there was no probability of a considerable quantity of gas lodging there? You must take into consideration that the top side was 12 or 13 feet above the level on the bottom side, and that the fall itself really increased in thickness till it went to the lower side, so that the roof above the fall was really level. There was no cavity, and the gas made its way out.
2188. So that you think there was no possibility that the quantity of gas which caused you so much trouble and so much care was lodging there? It could not lodge there. All the trouble I had was to keep it out of the old room.
2189. Was there any area of old workings alongside of that which the air could not reach, and in which a considerable quantity of gas might lodge, and from which the gas might be forced out by the concussion of another fall? Do you mean on the left side of the dip?
2190. Yes? No. You see there is no coal worked out there, as the coal is too thin.
2191. Turning our attention to the right-hand side of the dip, is there not a probability that a considerable quantity of gas would lodge in the old workings or waste which you could not reach or could not examine, and that the concussion of a fall would force that gas out to where the men were working? No, I cannot see that.
2192. Then, on the 1st of February this year you report: "The falls at the foot of the dip"—You use the word "falls"? Yes; that is both sides this time.
2193. You report: "The falls at the foot of the dip still giving off a large quantity of gas, and cause much trouble in keeping places clear"? That is the same place as I referred to in the last report.
2194. Was there any increase to those falls? Yes; on the right-hand side.
2195. Has there been a considerable addition to the fall at the right-hand side? It has come further along, but not any further up the hill, making its way along the fault at the foot of the dip.
2196. Has there been any increase of the fall to the right? As the pillars were being worked out on that level the two falls were meeting one another along the fault.
2197. Between the dates I have just mentioned—the 20th of January and the 1st of February—were there any complete pillars removed, and was a considerable addition made to the fall we are now discussing? The fall was gradually increasing; portions were coming away on the fault.
2198. Still tumbling along the fault? Yes.
2199. Has it fallen higher up? Is the thickness of the fall increasing?
2200. Yes? No, it did not seem to increase It seemed to go up to a white stone formation next the fault, and above that seemed to be hard and solid roof.
2201. And although the breadth has increased the fall has not increased in thickness? Not as far as I can see.
2202. How far could you see? Ten yards down, anyway.
2203. There might be 50 or 60 yards you were unable to see? I could go in any portion of it along the front of the fall and see 10 yards down.
2204. About what area were you unable to see? Next the fault?
2205. Yes, and right towards the boundary where the pillars were removed? Thirty feet; the whole length of the fall.
2206. And what was the whole length of the fall? Sixty yards.
2207. Thirty feet by 60 yards you were unable to see? Yes.
2208. Was the air sufficient to reach over every part of that? No.
2209. Is there no likelihood of a considerable quantity of gas accumulating there? Not unless there was a very high cavity—higher than the ordinary level of the fall.
2210. Were you able to see the top of the cavity all over the fall? Not in next the fault.
2211. Now, the fall might have been very thick—there might have been a very considerable quantity of it? That is speculation; no one could tell. I can only tell you what I saw. The roof was very hard. I could show you a hard white stone roof, and most probably that would not come away very readily. There was a row of pillars supporting it.
2212. Remember, I am dealing with the right hand side of the dip. There was a considerable area which you were unable to see—a considerable area which could not be ventilated. There might have been a considerable thickness, and the cavity might have been a considerable depth, in which gas might lodge. Is that likely? No, I do not think it is likely with the roof that was there. Speaking conscientiously, I could not say that it was likely—not unless there was a much larger space for it to accumulate in.
2213. You think the nature of the roof was such that the cavity could not be very deep? No, not until we got 100 yards or so of space.
2214. You only think that? I am not able to say positively.
2215. Come to the left hand side. Was there an increase of the fall near the left hand side of the dip? No, it could not increase there; there was no space.
2216. Then the falls were confined to the right side? Right along.
2217. There was no increase on the left? No, but the right was making towards the left.
2218. So far as the left hand side was concerned there would be no room for a greater thickness of fall, and consequently there would be no greater cavity created? I do not think so.

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2219. Going along a little further down, you say in your report book, on page 85, 9th February, "Along the break where the pillars have been worked out and roof has fallen down, a quantity of gas is showing"? Yes.
2220. What do you refer to in that case? That is the same break on the right-hand side.
2221. You are now referring to the same break and the same fall? Yes, the gas was exuding from the fall. No body of gas was exuding, but you could find it in the lamp exuding from the fall.
2222. Was that in this particular part which you were able to see where the gas was exuding from the fall? Yes.
2223. Is it not likely that gas would also issue from the portion you were unable to see and that gas would lodge there? No, I do not think that is likely. I could pass through to the hard roof to the top of the fall.
2224. Right over the whole of the fall? Only on the top portion.
2225. The roof is still falling; it is likely to become thicker and probably broader and longer. You were unable to see all over the place? I could not see all over it.
2226. Very well. Was the air able to reach all those places? Not down to the lower portion.
2227. That being so, was gas not likely to lodge there? Not so long as it was clear and the gas could get to the top side. What I mean is, that the fall had not actually been chopped.
2228. Could you see 50 or 60 yards? There were not 50 or 60 yards to see.
2229. You tell us you were not able to see the lower portion? Yes.
2230. Were you able to tell the height of that fall when you could not see it? No.
2231. Is it not likely that the gas would lodge in that top cavity which you were unable to see? If there was a hole for it.
2232. Was there any hole for it? I cannot say; I never saw it. If there was any hole for it to lodge it would do so.
2233. The roof had fallen, and you had no idea to what extent; therefore there is a strong probability that there might have been a considerable quantity of gas lodging there which you knew nothing about? If there was a hole for it it is possible.
2234. Was there not a hole for it? I could not say. I would pass no opinion on the subject. I never saw it, and am therefore unable to say.
2235. That is a very cautious answer. Now, I want to get at the bottom of this. I want to know the area of the increased fall? At the time of the explosion?
2236. No; I am dealing with the 9th of February? About 60 or 70 yards on the right side.
2237. And how much on the left? Ten or twenty.
2238. You cannot tell the thickness? On the top side it looked like 3 feet thick and gradually increasing.
2239. As far as you were able to see? Ten yards down it would be 6 feet thick.
2240. There might have been 20 feet of a cavity in the portions you were unable to see? There might have been.
2241. And there might have been a considerable quantity of gas lodging there? Yes; if there was a hole it would lodge.
2242. There must have been a hole if the roof had tumbled in? There must be some hole, but it is impossible to say what it is like. It possibly is not a very extensive one.
2243. You say that 10 yards down the fall would be 6 feet thick. There might have been a portion 20 feet thick for all you knew? There might have been.
2244. On page 87, 6th March, you say, "Gas can be still seen coming off the fault. Is that the same fall? The same fall.
2245. Is the fall any larger? The two falls gradually met; I did not like them to come any further up the hill. I left in sufficient pillars to steady the roof, as I did not want the falls to follow me up.
2246. You are speaking of the dip itself? Yes.
2247. I am speaking of the airway from the road. Did that fall increase away to the main road towards the airway on the right? You mean coming up the hill?
2248. Yes, coming up the hill? No, I never allowed it to go there, I left in sufficient pillars to steady it.
2249. Did it increase in breadth? No, it could not.
2250. On page 88, 19th March, you say, "No gas to be found in any of the worked-out rooms." You are speaking of the rooms there? Yes, the worked-out rooms.
2251. That is to say, the rooms were worked out. Were the pillars left standing there? Yes, on the left-hand side.
2252. You generally examined the old rooms which had not fallen in? Yes.
2253. And there was no gas there? No.
2254. The pillars outside away from those rooms which were worked out—did they increase the fall? No, they are standing yet.
2255. Then you go on to say, "Gas can still be found coming off the fall at the foot of the dip, and as no men are in return airways the full force of fan is stopping." Was that because there was no danger from the gas there? No danger could arise from the gas.
2256. *By the Chairman:* You have stated several times to Mr. Glassey that you do not think gas could have accumulated where those falls took place at the bottom of the dip, either on the right-hand side, or on the left-hand side. Now, supposing there had been some larger fall that you could not see, and a fall of the roof had taken place, with your system of ventilation is there any reasonable probability of the gas having got to the place where the Houstons were working? I do not think so; I cannot possibly see how the fall could force it away a distance of 100 yards through the airways against 14,000 cubic feet of air per minute.
2257. Not even if there was a larger fall which you could not see? No.
2258. You don't think it could be possible? No.
2259. Had it done so, would not the effect of the explosion have been greater, and not so local? Yes, it must have been.
2260. Must there not have been a large quantity of gas at the foot of the dip if it had been forced to where the Houstons were working? Yes.

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2261. You would not have expected a local explosion such as this appears to have been if the gas that exploded accumulated there? No, it would have been much more severe.
2262. Then, in your opinion, you don't think it possible that the gas which caused this explosion could have come from the falls at the foot of the dip? No, I do not.
2263. On the day that the four jurors who sat at the first inquiry went down the mine you went with them, did you not? Yes.
2264. And you went into the dip workings with them? Yes.
2265. How many of you were there altogether? There were four of them, Caldwell, and myself—that is six altogether.
2266. How many safety lamps had you? We had two.
2267. You took two into the dip? No, one they would not allow to be taken in. We took two down to the door, and they seemed to consider that one—a Clanny—was not safe, and it was left outside the door, and the little Davy was taken into the dip.
2268. You had only one lamp, then, in the dip workings? Yes.
2269. Who had charge of it? Sometimes I had, and at other times any of the other four had it as they wanted it.
2270. Did you all go down to the heading where the Houstons and the other three men were working? Yes.
2271. Did you see any gas where the Houstons were working? There was just a little there, just sufficient to draw the light.
2272. Was that lamp taken into the heading where the Houstons were working either by you or any of the others? Yes, I took it in; so did the others.
2273. You took it in? Yes, and McKinnon himself took it in, and examined the roof.
2274. *By Mr. Glassey:* What is the distance from those falls at the foot of the dip to where the explosion took place? Straight up the hill?
2275. Yes? Between 40 and 50 yards; I think about 40 yards.
2276. From the falls at the foot of the dip to where the Houstons were working? Yes; about 40 or 50 yards straight up the hill.
2277. You were unable to see the breadth of the fall? At the foot of the dip?
2278. Yes; that same fall? The breadth is about 20 yards, and the length about 60 yards.
2279. So you actually took the lamp, and the men went down and examined the place where the Houstons were working? Yes.
2280. And some of the other men did so? Yes; McKinnon took it himself; the lamp did not, of course, continue on the roadway all the time.
2281. And you examined that place in the dark? We had one light; the other light they would not allow to go down. The reason I did not take another Davy lamp was because the glass was broken, and I had no more glass. As I have already said, we took two lamps with us—the one they would not allow to go in, and the one we examined the place with.
2282. What is the distance between where the nine men were working and where the five men were working? Between 15 and 20 yards square up the hill.
2283. Was the place between the two groups of men absolutely clear of falls? Right underneath the nine men there was a big fall.
2284. Between where the nine men were working and where the five men were working? No; further in. There was a large airway which you could go through.
2285. On the day the gentlemen who constituted the judicial tribunal at the inquiry examined the mine, was the ground still clear between where the nine men were working and where the five men were working? At the edge of the fall?
2286. Yes? No; there had been an addition to the fall from the time I had examined it before up to that time; but still, outside that, there was 4 feet square of an airway.
2287. Which was uninterrupted? Yes.
2288. *By Mr. Thomas:* If I have understood aright there is water in that dip? Yes, there is a quantity of water collected at the foot of the dip now.
2289. How long has the water been accumulating there? Since we worked out the bottom section of pillars—perhaps six or seven months.
2290. So that in the case of a fall coming down in the level that place would have been full of water at the time of the explosion? Oh, yes.
2291. So that there was no likelihood of that place being a harbour for gas? No.
2292. As long as there is water there will be no gas? There must be 20 feet of water at least at the foot of the dip.
2293. And if the water is there there will be no gas there? No, it could not lodge there.
2294. *By Mr. Fryar:* Do you think the water would be up to the roof anywhere? At the lower side?
2295. Yes? Very much more than up to the roof.
2296. *By Mr. Rankin:* You mean a good way up the dip? Yes.
2297. *By Mr. Glassey:* Would the water get into the cavities? Yes.
2298. *By Mr Fryar:* Touching that 4 feet of airway, was it between two pillars, or was it next to the new fall you speak of? Between two pillars, and it was left as a stand-by, to make sure that if a fall came away we should not be blocked.
2299. *By Mr. Rankin:* What sort of fault was it—an up-throw or a down-throw? It was an up-throw.
2300. *By the Chairman:* When did you commence taking down the fan? A week after the accident.
2301. The accident was on the 21st? Yes; and I took it down the following Wednesday.
2302. That would be on the 28th? Yes; on the 28th of March. I may explain that I would not have taken it down had I not had more than sufficient air provided. The quantity of air provided was more than we wanted, and I knew that by taking the fan down I could not possibly do any harm.
2303. How long has the Burrum mine been working since it was last opened up? It is about seven years since the Bowens first started.
2304. And how long have you been in charge of it? Since the Isis Company took it over—nearly twelve months. Since the 22nd of May last.

J. Sharp. 2 May, 1900.

2305. Have you been in the habit of examining that mine weekly? Yes; daily sometimes, but generally weekly.
2306. You have made the usual weekly inspections and have entered the result in your report book? No; I have not started a report book. I have been too busy engaged in shifting machinery, and I appointed Keene as manager.
2307. Have you ever seen any gas in that mine? No; personally I have not seen gas in it, but I know there is a little gas there in one old level.
2308. Did we go along that level? No; it is barricaded off. No one can get there but the overman, who goes in now and again.
2309. Does he see any gas there? There is a little always to be found there, but it is very little.
2310. Nobody is working there? Nobody is working within hundreds of yards of the place.
2311. As far as you know it is the only place in the mine where any gas is to be seen? I have never seen any gas in the place myself and the overman has seen no gas except in that one place. There is none to be heard, and you hear it before you see it.
2312. Has there ever been any accident in that level from gas? Not to my knowledge.
2313. *By Mr. Rankin:* You know that a little did at one time explode in it? I have heard so, but it was a very little.
2314. *By the Chairman:* Have you heard the facts in connection with that little explosion? Yes, I have been told of the explosion.
2315. How did it happen? I do not believe the parties knew there was any gas there. They were looking about with a naked light and touched it off.
2316. Was anybody injured? No.
2317. *By Mr. Fryar:* Is there any current of ventilation passing into that level? Yes, there is a quantity of air passes over there—plenty to keep it clear of gas.
2318. Then the small quantity of gas that you speak of is what is regularly exuded? Yes.
2319. It is swept away as fast as it is made? It is never allowed to collect. It gets up into the roof where there is a bit of a fall and the timber has been placed about a foot higher than the ordinary timber. That is the place where you find what gas there is.
2320. In case you start that level again, I suppose it would be possible to sweep the gas out and keep it swept out so that there would be no danger of explosion? Oh, yes, without any trouble.
2321. *By Mr. Rankin:* You do not intend to start it again? No, I do not intend to start it again.
2322. *By Mr. Fryar:* You have got near enough to the river? I do not know what has been worked above it, and I do not want to go too near the river.
2323. You are more afraid of water than gas? Yes.
2324. *By Mr. Glassey:* You say the mine is examined every morning? Yes.
2325. Is that Mr. Keene's duty? Yes.
2326. Does he keep a daily record book? Yes.
2327. And you keep a weekly report book? I have not started it at the Burrum mine yet, simply because Keene is acting for me. I will as soon as I take over full charge.
2328. Have you any plan of the Burrum mine? Yes.
2329. Have you got it with you? No, I have not.
2330. How often do you keep your work posted on the plan? It is done every three months; sometimes every month, according to whether I want to know where I am going.
2331. Do the men remain at a station in the morning until the overman has examined the mine to see if it is safe? Yes; they are not allowed to go away from the bottom until he comes out.

JOHN MCKINNON, certificated mining manager, recalled and further examined:

J. McKinnon. 2 May, 1900.

2332. *By the Chairman:* We want to clear up a question with reference to the safety lamp that you took down the dip on the day you examined the mine. When you went into the dip workings, who was in charge of the safety lamp? Through the door Mr. Sharp had the lamp, and I thought the flame was increasing rather much. I took the lamp from him and reduced the flame to what I thought a proper size. Not knowing the way down, Mr. Sharp led the way with a light all the way down, and when we got to where the victims had been working, he gave me the lamp to search along the face, and we examined the face for any hole in the roof.
2333. You were at the face inside the dip? Yes.
2334. *By Mr Rankin:* Off the dip to the right-hand side? Yes; where the Houstons were working.
2335. *By the Chairman:* You took the lamp in yourself? Yes, just for a minute or so to see along the face.
2336. And you examined the roof with it? Yes, as near as possible.
2337. And did you examine the floor with it? Yes; I examined it and felt the floor all over with my hand.
2338. And you had the light there? Yes; I gave Mr. Sharp the light and he held it close to me. It was the same as if I held it in my own hand.
2339. And you also examined with the light the place where the victims were working? Yes; that was the first examination.
2340. The second time did you go to that place? Yes.
2341. Did you take the light in the second time? Yes. We went in a different way the second time.
2342. From the dip level? Yes.
2343. But then you had to turn back again? Yes; we could not find any access, and had to turn back. Mr. Sharp had the light, and, knowing the colliery, he led the way; and if I required the light in my hand he handed it to me.
2344. We want to clear this up, because Mr. Roderick seemed to think you went through and felt for these cracks or crevices, and that you had no light. He was asked—

Was that in the dip itself, or in the place where the men were working? The head of the dip. McKinnon and myself went in, but took no lamp inside.

You did take the lamp inside? Yes.

J. McKinnon. 2 May, 1900.

2345. Then, in another question he was asked—

Did you examine with a safety lamp to see if there was any gas located there? McKinnon and Sharp were in the place, and had the lamp out as far as they could, and could not discern anything.

That is not correct? No.

2346. But did he go in with you? Yes; I think so. The whole lot of us were together. Mr. Sharp held the lamp for me wherever it was required.

2347. You think Mr. Roderick must be mistaken? Yes, because it is impossible to examine a place in the dark.

2348. Did you see who took the lamp in the second time? No, I did not.

2349. Well, the second time you visited the heading where the Houstons were working did you take the lamp in? No.

2350. Where was the lamp then? We had the lamp outside, but Mr. Sharp carried it in.

2351. It was taken in on both occasions? Yes.

2352. That lamp was taken in the first time—you took it in, and Mr. Sharp held it for you, showing you about; and the second time Mr. Sharp took it in? Yes.

2353. What about that place you say you had no access to? That is the place between where the nine men were working and where the five men were working, with which we could not find any connection.

2354. *By Mr. Rankin:* Were you looking for the fall? I did not know there was a fall then.

2355. *By Mr. Glassey:* Why could you not find a connection? The fall had blocked the travelling way.

2356. And it had covered the airway? Yes; there was no airway whatever.

2357. Did you see that during your first visit? No, we were not there during our first visit. I have a rough sketch here, and on it I can show you where we proceeded on our second visit. [*Sketch produced, and the course taken by witness and his colleagues indicated.*]

2358. *By Mr. Fryar:* Did that fall block the airway? Yes.

2359. Where did the air travel? There is always a little bit that will escape under the canvas.

2360. *By Mr. Rankin:* Was there any height where the fall was for the air to get through—was there any room for the air to pass over? There is no room for the air to pass over in the present fall.

2361. *By the Chairman:* The point which we wish to clear up is, whether on both occasions a lamp was taken, either by you or somebody else to see and examine the place? Yes.

2362. You did not go in the dark? No, no!

2363. *By Mr. Glassey:* Is the fall you speak of the fall you allude to in your report as having liberated a lot of gas? Yes, in my opinion.

2364. Then, that fall is between where the nine men were working and where the five men were working? Yes.

2365. What is the distance between where the nine men were working and where the five men were working? I could not say accurately.

2366. You did not measure it? No, and it is no use guessing at the distance.

2367. The fall was so extensive that you could not see right to the top of it? No.

2368. You went up about 5 feet? Yes; and put the Davy lamp up as far as I could reach, and it was not near the top then.

2369. *By Mr. Fryar:* But as far as you put it you could not see any gas? No.

D. Roderick. 2 May, 1900.

DANIEL RODERICK, miner, recalled and further examined:

2370. *By the Chairman:* When you were giving evidence the other day you were understood to say that on entering the heading from the dip where the Houstons were working, the lamp was left outside and not taken into the working place at all. Is that correct? The glass lamp was left outside the door.

2371. When you got through the door, some of you, I understand, thought the Clanny lamp—the glass lamp—was not quite safe to take down, and you took the Davy, or gauze, lamp? Yes.

2372. Was that Davy lamp taken into the working place where the men were at the time of the accident? Yes; Mr. Sharp had the lamp in his hand all the time.

2373. All the time? All the time we were in that stoop on the right-hand side of the dip, Mr. Sharp stood there.

2374. According to your evidence the other day, we understood that the lamp was never taken out of the main dip? It was taken just on the side of the main dip.

2375. *By Mr. Rankin:* Four or five yards, was it taken? It might be that distance.

2376. *By Mr. Fryar:* The Houstons were not leaving any rib of coal between that and the dip? No.

2377. Were they working the coal off between the working referred to and the dip? Oh, yes; to the dip.

2378. *By the Chairman:* Was the Davy lamp taken to the exact spot which was pointed out to you as the place where the Houstons were working? No; I did not notice it; we went in in the dark, and there was only one lamp there.

2379. You also examined the roof and floor for any cracks or crevices? Yes, with our hands.

2380. Did you have a lamp at all when that examination was taking place? Mr. Sharp had a lamp.

2381. Where was he standing? On the side of the dip, about a couple of yards from the side, on the bank where we were sitting.

2382. He was not showing you the light about those working places? I did not notice it at all.

2383. How far would he be from where you and Mr. McKinnon were examining the place? A few yards; but I could not say exactly.

2384. He was a few yards off you? Yes, we were a few yards inside of him towards the working.

2385. Mr. McKinnon told us that Mr. Sharp brought the lamp and held it about where he was examining? We went inside of the lamp. I know that Mr. Sharp came to the inside of the dip, and he was not far off.

2386. Are you sure that McKinnon did not take the lamp from Mr. Sharp? I could almost take my oath that neither he nor any one of us took the lamp, but McKinnon might have taken it when we went through the door. He might have taken the lamp when we got through the door when we talked about the flame being too high. He might have taken it then.

D. Roderick. 2387. *By Mr. Rankin:* He took it and reduced the flame? Yes; he might have done that.
2388. *By the Chairman:* And then he gave it to Mr. Sharp to carry down and lead the way? Yes.
2 May, 1900. 2389. Of course there were six of you, and you could not all see. Was not the lamp taken into the workings as far as you went? I could not take my oath that the lamp was not taken in, but I did not notice it.
2390. You did not notice it? No; and I do not believe Mr. McKinnon had the lamp there at all.
2391. He says he did not take the lamp, but Mr. Sharp was holding the lamp where he wanted it or so that he could examine the roof and the floor by the light of the lamp? Mr. McKinnon and myself were following, and if we had the light we could not follow much.
2392. Were you then feeling for a crack which might be covered over with dust in the dark? I could not take my oath that the lamp was there, but I did not notice it.
2393. *By Mr. Glassey:* Are you speaking of the first or second visit? The first visit.
2394. Did anything occur on the second visit? I could not be certain whether we went there on the second visit.
2395. Did you separate at all during the first visit?—Did any of you go a distance away? We might have been a couple of yards from one another.
2396. Did you separate any distance from the others? Not far. Mr. McKinnon was in the road, and I was next to him, and Mr. Tench sat on the side of the dip.
2397. Mr. McKinnon would not be far away from you? He would not be far away.
2398. I was wondering if by separating from one another it would account for the discrepancy between your evidence? We might have been a couple or three yards from one another.
2399. In Houston's place there was some coal piled up? Yes.
2400. Did you go beyond where that coal was piled up and examine the place in the way you describe and grope about? Yes; we could see from the top of the coal the last shot Houston had fired, and he had turned the coal back.
2401. You saw the mark of the hole? We could not see any mark, but we knew where the shot had been.
2402. *By Mr. Fryar:* Clearly the gas was not fired from that shot, or they would not have been able to throw the coal back? No.
2403. *By Mr. Rankin:* How do you know the shot had been fired? The coal was turned back.
2404. They might have cut the coal down without a shot? I think they were blasting. The second time we went into the Hamilton level, and down the waste, and back down to the bottom level, when we met the fall there.
2405. *By Mr. Glassey:* The fall had closed the airway? Yes.
2406. Between the nine men and the five men? Yes.
2407. *By Mr. Rankin:* Was not the air going over that fall? There was a little air going when we were down.
2408. But you could not get over it? No.
2409. *By Mr. Glassey:* It was a large fall? Yes, we could not see the top of it.
2410. *By Mr. Fryar:* At whose instance was the Clanny lamp left at the top of the dip? At our instance. I believe I asked if that lamp was going down. It was left at the door of the dip. The second time we went down to the air-course the Clanny was with us.
2411. Was the Clanny left behind with the idea that it was not as safe as the Davy? We would rather use the old Davy than the Clanny.
2412. Had you doubts about the Clanny's safety? Yes, if there was any quantity of gas to test it with.
2413. I am not speaking of testing. Would you not have been the better for a little more light when inspecting? Yes, and we took it to the door, but we did not know what we would meet below the door.
2414. But, whatever you met, was there more danger from explosion with the Clanny lamp than with the Davy lamp? I knew the Clanny at home, and I knew it wanted rings and different things round it. I trusted the old Davy much more, because I did not know how they kept their Clanny lamps there. We were more used to the Davy.
2415. It is rather a serious matter if we throw doubt on a particular lamp which is greatly in favour, and which gives a better light than the Davy. Consequently we want to know if there was any good reason for discarding the use of the Clanny lamp? We did not discard it the second time. We took it with us. On the first occasion I preferred the other, for my own part. We were testing at the time.
2416. *By the Chairman:* Supposing the Clanny lamp to be in good condition, have you the same faith in it to go into gas with as you have in the Davy lamp? Well, I never worked with it.
2417. You have no reason to know that it is not quite as safe as the Davy? No. I do not know. I have never worked with it.
2418. You had no faith in it simply because you did not know anything about it? No.
2419. *By Mr. Glassey:* You were not so well up in the Clanny as in the Davy lamps? I know we never had them in the old country. When we would be working with naked lights we would have the old Davy lamps in the road.
2420. *By the Chairman:* You know that the Clanny lamps are used in some parts of England? Yes. I have used them myself, but not in gas.
2421. *By Mr. Fryar:* There is another reason why the Davy is more used than the Clanny—they are only half the price? I do not know anything about the price. I had to pay 5s. 6d. for the Clanny.
2422. And 3s. 6d. for the Davy? I do not know what they are. I never worked regularly with the Davy. I have worked with the Clanny where there was no gas.
2423. *By the Chairman:* You are working in the Howard Colliery? Yes.
2424. How long have you been there? Since the commencement.
2425. How long ago was that? About eighteen years ago.
2426. Have you been working as a miner the whole of the time? Yes. I worked a short time at the colliery on the river—the Dudley.
2427. You have worked in the old shaft? Yes, No. 1.
2428. During the time you have been working in this colliery have you seen any gas? Not a particle. None at all.
2429. Not during the eighteen years? No, not at the Queensland Collieries; not a shade of it.

2430. Have you worked in most parts of the mine? In different parts.
2431. During that time have you always worked with naked light? Yes.
2432. There has never been any reason for the use of safety lamps? No.
2433. Have you heard of any of the miners meeting with gas? No.
2434. You have never heard any of the men say that they had met with gas? No.
2435. Are the workings, to the best of your knowledge, examined every morning by the fireman before the men go in? Yes, there is a man going round every morning, and he marks the working places with his name and the date.
2436. The name of the man who examined it and the date are an indication that he has examined the mine, and that the working places are safe? Yes.
2437. With reference to ventilation—to your knowledge is there sufficient ventilation kept up in that mine? It is pretty fair, certainly; in years gone by it was ventilated under disadvantages.
2438. That was in the old shaft? Yes, but this shaft is much better; we are only troubled with black damp there.
2439. And you have heard no complaints as to safety so far as gas is concerned? No.
2440. When were you working in the Dudley Colliery? From the beginning up to 1890.
2441. What was the depth you were working at? I could not say; about 80 or 90 feet, but I am not sure.
2442. Then, it was not a deep shaft? No.
2443. You saw gas when you were working at the Dudley Colliery? Yes.
2444. In which part of the workings did you see that gas? In the levels.
2445. In the main levels? Yes; in the main levels.
2446. Was that gas seen during the driving of the levels? Yes.
2447. Did you see it often? Yes, very often; I had to be very careful there in shot-firing. I was in charge there for a while.
2448. When you were driving those levels what system did you have for bringing the air right to the face? There was an air course going on——
2449. A brattice? No; there was a double level, and then an air course.
2450. *By Mr. Rankin:* Was that with a gob or a piece of coal? A gob.
2451. *By the Chairman:* Then, the gas came off from the coal in the level continuously almost? At times there were blowers there.
2452. Little blowers? Yes; little blowers.
2453. Did they give off much gas? No; very little; with a little brush we cleared it.
2454. In working those levels did you work with a naked light? Yes; all the time.
2455. You trusted to the ventilation? Yes.
2456. During the time you were working in the Dudley, was there any accident from an explosion of the gas? No.
2457. None at all? No.
2458. No man was injured? No.
2459. Do you know if any gas was ever fired? Yes; I saw it fired.
2460. Was that in the face of the level? In the face of the level just in the roof where we had top-brushing.
2461. Notwithstanding that you knew there was gas you used explosives? Yes.
2462. What explosive did you use? Powder and fuse.
2463. Were there any special precautions taken in using explosives? Yes, the manager would not allow anybody to fire a shot until the person he had in charge examined the place, and saw that it was safe.
2464. It was examined every time before a shot was fired? Yes.
2465. Was not there a chance of the explosion itself driving gas out? I do not know; we never happened to strike a blower, only in the level, not in the face.
2466. Was it only in the level that you saw that gas? That is all, only in the main level.
2467. Not in working the stoops? We never worked the stoops.
2468. Who were the proprietors of that Dudley Colliery? They were a company of working men.
2469. *By Mr. Glassey:* Is that the mine Mr. Eli Jones had something to do with? Yes.
2470. *By Mr. Rankin:* Who was the manager? Henry Harris.
2471. *By the Chairman:* How long were you there? Three or four months.
2472. Do you know if the mine is being worked now? No, it has not been worked for years.
2473. Have you ever worked in any other mines in this district? Only Torbanlea; I believe I was three months in Torbanlea.
2474. Did you ever see any gas in that mine? No.
2475. You have had a good deal of experience here. Have you any suggestion you would like to make with reference to the prevention of accidents from the occurrence of inflammable gas?—Would you as a miner like to be forced to work with a safety lamp when you are working away pillars next to the waste? No, I do not think it would be in any way advisable.
2476. Not even if gas had been seen there? No; not with taking precautions.
2477. I thought that as you have worked here for some time you might have some suggestions to offer? No; I know we worked stoops at the Queensland Colliery, and we never had the least gas there. We have had heavy falls, but no gas.
2478. Do you think that the enforcement of the use of safety lamps in such places might lead to other accidents from the want of light, or from using a poor light? Well, I know you would not get nearly as good a light with safety lamps, but, of course, I would be in favour of using them if they were required for safety.
2479. That is, if gas has been seen somewhere in the neighbourhood? No.
2480. *By Mr. Glassey:* You say you have been working in the Queensland mines for about eighteen years? Yes.
2481. Continuously, except the time you were at the Dudley Colliery? Yes; I never worked anywhere else.
2482. Did you ever see any black-damp in the Queensland mines? Yes; there was plenty in the old shaft.

D. Roderick. 2483. How long ago was that? I suppose ten or twelve years ago.
2484. Did you ever see any black-damp in the mine subsequent to what you saw in the old shaft? In the shaft we are working now?
2 May, 1900.
2485. Anywhere? Oh, yes; we have seen some in that mine where we are working now.
2486. Much of it? No, not much; nothing to what it was in the old shaft.
2487. Does that arise from deficient ventilation, or what? I believe it comes from the old workings. When you are leaving them you must get a quantity; you cannot help it, because you cannot get the ventilation round.
2488. Are you referring to the pillar working? Yes.
2489. In working out the pillars near the old workings have you seen black-damp? A little, but not much.
2490. Have you seen what the miners know as white-damp, that treacherous damp? No; I have not seen any of that.
2491. Would you, as a practical miner, knowing that in working the whole coal a considerable quantity of gas was given off from time to time, think it necessary, when working out the pillars and alongside the waste to use safety lamps? No doubt there ought to be a lamp there. If they can work with a naked light, there ought to be a safety lamp between them and the gas.
2492. Do you think that in working out the range of pillars closest to the old workings, and where gas is frequently met with, it would be a prudent thing to work with safety lamps? No doubt it would be safer.
2493. Would you recommend it? I would not recommend it for my own part, but in the case of men who could not be trusted it might be safer.
2494. You will agree that amongst a group of men one man's life hangs upon that of another? Yes.
2495. Do you think it would be advisable that all men, whether careful or otherwise, should work with safety lamps next the old waste workings? It would be safer.
2496. Would you recommend it? I believe it would be advisable.
2497. Have you been fairly free from accidents in the mine where you were working? Yes, there have been very few accidents. I only know of two deaths, and one or two slight injuries. One man was killed through his own neglect.
2498. So far as you know, during your connection with this mine, every reasonable care has been taken to protect the workmen and to keep the mine safe and in good working order? Yes.
2499. There have been no complaints from the workmen with regard to any deficiency of timber or of ventilation? No; I never remember that we had a case to come out and complain about. We have always had the greatest advantages that the company could give.
2500. You have spoken of the mine being examined in the morning before the men go in. Do you know how the mine is examined? No, I do not.
2501. *By Mr. Fryar:* Touching the Dudley mine, did you work there up to the time it was abandoned? No.
2502. Did you work there at all when Mr. Gillin was manager? I worked there a couple of weeks for Gillin. I was there in the time of Harris, when the mine was taken over. That was in 1890.
2503. Did you learn immediately that there was gas in the mine? Yes; there was gas at the time I went there, but it was not in any quantity—just a little, that you could distinguish.
2504. I think you said that you had charge of the firing of shots? Yes.
2505. Do you know about what part of the seam the gas came from? It was blowing in the coal.
2506. Any particular part? There was one alongside the level on the main floor.
2507. Was that near the floor or half-way up the seam? Half-way up the seam.
2508. Was there a little band in the seam in that immediate neighbourhood? Yes; there was a band.
2509. What was it composed of? I do not know.
2510. At any rate, gas appeared to come from near the band? Yes; not far from the bottom.
2511. On the occasion of the gas lighting, was that by accident, or was someone trying it? Just trying it.
2512. *By Mr. Glassey:* Was there much of it? No; it just knocked him down.
2513. Before the men fired any shots it was your duty to examine the places? Yes.
2514. Was that always done? Yes, to see if there was a fresh blower. There were people there who never saw gas, and the boss did not care to leave them without supervision in case the gas frightened them. There was really no quantity of it.
2515. And that practice was followed out at the Dudley? Yes, that was followed out.

WILLIAM CARROLL, miner, examined:

W. Carroll. 2516. *By the Chairman:* Have you been working in the Torbanlea Colliery? Yes.
2517. How long were you working there? About six months.
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2518. What experience have you had in coal-mining? I have been at mining for about eighteen years.
2519. Where did you gain your experience? In the old country and out here—partly at Ipswich.
2520. What part of England? The north of England—Northumberland.
2521. How long were you at work in the old country? About five years.
2522. All the time in Northumberland? Yes.
2523. Did you work there in any mine where gas was met with? Yes. I used a safety lamp there for over three years.
2524. It was necessary to do so? Yes.
2525. In what colliery was that? In the Backworth Colliery.
2526. Were you working in that colliery the whole time you were in Northumberland? Yes; it was the one I started in.
2527. And the other two years, how did you work? With naked lights.
2528. In the same part of the mine? No; in the high main.
2529. Oh, another seam? Yes; there were four seams in the colliery.
2530. So that you had a fairly good experience of a gassy mine? Yes.

2531. Were you working in Torbanlea up to shortly before the accident? Yes; the last shift I did there was on the 17th of March.
2532. Which portion of the mine were you working in? Where the men met with the accident.
2533. With whom were you working? Johnstone, Gambie, and Griggs.
2534. The 17th would be a Saturday? Yes.
2535. How was it you were not working on the day of the accident; had you left the mine? No; I had not left.
2536. How was it you happened not to be working on the day of the accident? I did not care much about working in the mine at the time.
2537. Will you explain why? Because I saw danger ahead. I thought I saw danger, anyway.
2538. What made you think there was danger there? Oh, in taking the coal out and leaving a waste in time a fall must occur and force the gas out to the open lights. That is what I always said while I was there.
2539. You thought a fall might occur and force the gas out of the waste? Yes.
2540. Had you any reason to think there was gas in the waste to be forced out? The only reason I had was that everyone said so. They reckoned there was gas in the mine. Mr. Caldwell went round every morning to see if everything was safe.
2541. Let us be clear about this. What do you mean by "everyone said so"? All them that were working there; my mates, too.
2542. Why did they go to work if they thought it was unsafe? Miners are always a bit daring; they may see danger, but they put up with it.
2543. There are certain daily reports written by the fireman. Do the miners have access to those reports? No; we never see any reports.
2544. Can you see the daily reports of the fireman, if you wish? I could not say; we might get to see them.
2545. Did you ever ask to see them? No.
2546. Do you know whether he reported the place generally to be free of gas? No.
2547. Do you know of any instance when he marked a place as dangerous for men to go in—I am speaking of the dip workings? No; only one day, the 2nd of March, I think it was, when the fan was stopped. There were six of us, the five victims and myself, and we were told that it was better not to go in.
2548. *By Mr. Glassey:* What was the fan stopped for? There was something wrong with it.
2549. *By the Chairman:* Where were you working then? Where the accident occurred.
2550. On the 2nd of March? Yes; we came home that day because the fan was stopped.
2551. Was that only a temporary interruption of the ventilation? Yes.
2552. Might not that happen anywhere? Yes.
2553. What made you think there was danger in the mine? Because there was gas there.
2554. When did you see gas? I saw it on two or three occasions—a small amount of it.
2555. Tell us about the date of those occasions? From the time I was working there; I could not give the dates.
2556. You were working there six months? Yes.
2557. And you saw gas on two or three occasions during that time? Yes, a small amount of it, and we used to waft it out.
2558. You saw gas only on two or three occasions during the six months you were working there? Yes.
2559. And saw only a small amount then? Yes, a very small amount.
2560. Yet suddenly on the 17th March you left the mine? Yes.
2561. What was the next working day after the 17th of March? Monday, the 19th.
2562. And on Monday, the 19th, you came to the conclusion that the mine was not safe enough for you to go down, and you did not go? No.
2563. On what occasion did you last see gas—how long before the 17th? It might be two months before that, in the first level in which I worked.
2564. Was that in the same place as you were working when you thought it unsafe to go down? No, it was further down.
2565. And you did not see any gas in any part in which you were working for two months before? No; it might be more.
2566. Then, will you tell the Commissioners exactly why on the 19th you suddenly considered the mine to be unsafe to work in? Down where we were working it was all waste workings; the coal had all been worked out, and a fall might occur at any time in waste workings.
2567. How long before the 17th do you say you were working in that very same working place? We had just started on the pillars going away from that level where the accident occurred.
2568. But how long? About a week.
2569. Where were you working before that? Just on the right-hand side below where the accident occurred.
2570. About the same place in the mine? About 30 yards from there.
2571. And how long were you working about that fall of the dip on the right-hand side going down? Within 50 yards; for about six months I was in two levels, and then at the pillars.
2572. Didn't you know during all that time—that is, six months—that there was waste there? There was not when I first worked there.
2573. For how long—has there been much there? We had just started to work the pillars.
2574. What amount of waste was there? I could not tell you; I worked in many places.
2575. You do not know what amount of waste there was? No.
2576. Do you know whether it contained any gas or not? As far as I know it did, but I did not see any down below where I was working.
2577. You did not see any? No, because I never went out of my own place.
2578. Two months before you left the mine what amount of waste was there? I could not tell you.
2579. Was there any waste? I think so.
2580. It never struck you two months before you left that there might be a fall? No.
2581. But it suddenly struck you on the 19th of March? It struck me when we started the pillars.

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2582. But you had then been started on the pillars a week? About a week, I think, but I could not say for certain.
2583. Had you ever worked out pillars before? Yes.
2584. Near waste? Yes, in Stafford's mine.
2585. Were you working pillars near a waste then? Yes.
2586. Were you working with safety lamps there? No.
2587. How were you working, with naked lights? Yes.
2588. Did you leave that mine because you thought it was unsafe? We finished it.
2589. You thought it was safe? Yes.
2590. Then, why did you think this mine was unsafe—you must have thought something when you left the mine—why did you think it was unsafe after working there for six months? I was frightened of gas.
2591. And you say had not seen any gas for at least two months previously? I had not seen any gas worth speaking about.
2592. Did you ever see any gas worth speaking about in those dip workings where you were working? No.
2593. Yet you say you had reason to think the mine was unsafe? Yes. One night, a Sunday night, my mate and I went to the mine to work; Mr. Sharp went down with us; we stopped at the top of the dip, and he went down to examine it, and when he came back he told us to go home again, as it was not too good.
2594. *By Mr. Glassey:* About what date was that? I could not really tell; it might have been in February.
2595. *By the Chairman:* Had the mine been closed on the Sunday? Yes.
2596. Is it not very likely in that case that a little gas would be found. Yes.
2597. Was it in large quantities? No.
2598. Only just a little gas that had collected through the mine standing still? Yes.
2599. Did you go down the mine on the following day, Monday? Yes.
2600. When the ventilation had been started again? Yes.
2601. Was there any gas in the mine then? No.
2602. Did you go to the same place as you were working in before? Yes.
2603. There was only just a little gas? Yes.
2604. Did you think that with that gas the mine was dangerous? No; we were there by our two selves on the Sunday, and Mr. Sharp thought we would be better out of it, for that night anyway.
2605. Then, am I to understand that you consider that under no circumstances should pillars be worked with naked lights when they are near a waste? You ought to have safety lamps.
2606. I ask you to answer the question as I put it: Is it your opinion that under no circumstances ought naked lights to be allowed in working pillars next to a waste, whether gas has been seen there or not? Yes.
2607. You think that in working out pillars safety lamps ought invariably to be used? Yes, I think so.
2608. In working pillars in any mine? Yes.
2609. Have you ever worked in the Queensland collieries more than on the night shift? No; I worked in No. 5.
2610. How long were you working there? Twelve months.
2611. Were you working pillars away there? No.
2612. Did you ever see any sign of gas in that mine while you were there? No.
2613. Had you no pillars to work away there? There were no pillars worked there that I saw.
2614. When was it that you were working there? I left there in 1897.
2615. Now, no gas having been seen in the workings of that mine, do you think that miners ought to be forced to work with safety lamps there in working away pillars? It is hard to say in a mine like that.
2616. You said a little while ago that safety lamps ought to be used in any case, whether there was gas there or not? If necessary, I reckon they ought to be.
2617. Do you think that in working away pillars it ought to be compulsory for miners to use safety lamps, whether gas has been seen or not? It is hard to say.
2618. Well, what is your opinion? My opinion is that they should use safety lamps in any case.
2619. Then am I to understand that you left the Torbanlea Colliery on that date simply because safety lamps were not used in working the pillars, without any reference to gas being there or not? I did not leave the mine altogether; I was going back to work again.
2620. Then, you thought there was some special danger that day? No; I did not think there was something going to happen that day.
2621. Then why did you leave the mine—you told us that you did not care about working in it? I said I did not care about working in it, but I did not say I left.
2622. Why did you not care about working in it? I was frightened that something was going to happen.
2623. You didn't think it safe to work in? No.
2624. Did you intend to go back to a mine that you did not consider safe to work in? The day after, I did.
2625. Did anything happen in the meantime to make it safe? No; it was only the fall I was frightened of.
2626. Had you reason to expect a fall at that time? No.
2627. Then what was your reason? When a fellow is sick he cannot help feeling like that.
2628. Oh, you were sick—you did not tell us that before. Is it true that you left the mine because it was unsafe? I did not say I left the mine; I said I didn't care about going back to it.
2629. As a matter of fact, you did not go back to it? No, I did not.
2630. You have told us that you did not care to work in the mine because you did not think it was safe—is that a fact? Yes.
2631. And yet you were going back to it on the Thursday? Yes.
2632. You started to say something about being sick—were you sick? Yes; to a certain extent.

2633. And was it not on account of being sick that you kept away? I was going that morning to work until I met a fellow named Colley, who said he was not going to work, and I thought, "I will not go to work either."
2634. Was he working at Torbanlea? No; in the Burrum.
2635. You stayed out just because someone asked you? That is why I stopped out on Wednesday.
2636. To be a mate for another man? Just to be at home with him for that day.
2637. Now, is it not a fact that you were sick on Monday and did not go to work? Well, if you like to know, I had too much drink.
2638 Then did you actually think the mine was too unsafe to work in? I had my doubts about it.
2639. But that was not the reason that kept you at home? I was not afraid to go down, but I thought something was going to happen.
2640. Now, with reference to the examination of the mine in the morning; to your knowledge was the mine examined by the fireman every morning? Yes, and we passed him as we were going into our workings in the morning. If there had been anything wrong he would have told us to stop.
2641. You did not go in until he had examined the mine? No.
2642. What did he examine it with? A Davy lamp.
2643. Do you know what his reports were? No.
2644. Simply your places were reported free? Yes.
2645. You would have known if they were not safe or if he had found gas there? We would have known.
2646. And during the last six months, when you were working on the coal on the side of the dip, had you ever to leave your working place on account of gas, or did he tell you it was not safe? Only on the night the fan was stopped. Mr. Sharp told us we had better go home.
2647. Do you think the ventilation was good? Yes, very good.
2648. With any reasonable amount of gas would the ventilation be sufficient to sweep it away and keep the mine in order? I think there was enough air travelling to keep the gas away.
2649. You spoke of a fall of roof taking place and driving the gas out, and you seem to have been very much afraid of this. Will you mention any experience you have had of falls taking place and driving the gas out? I have never seen anything of the sort.
2650. And yet you were very much afraid of it on this occasion? That is so.
2651. You have had no experience? Not of that.
2652. Have you any reason to think that the management of Torbanlea were not looking after the safety of the mine? As far as I could see they were trying their best to save an accident.
2653. Do you think the management was careful so far as the lives of the men were concerned? Yes, barring the use of safety lamps. That is the only thing I had against it. They ought to be using safety lamps. It was a well worked mine.
2654. And it is your opinion that safety lamps should be used in any mine? Yes, where there is gas.
2655. You said a little while ago, any mine whether there was gas or not? Where there are pillars.
2656. But with that exception of not using safety lamps you think it was a well managed mine? Yes.
2657. And you never had any complaints to make? No.
2658. Did you ever speak to the overman about the advisability of using safety lamps? No, I did not.
2659. Though you held such an opinion you never spoke to him or the manager? You cannot say what you like when you are knocking about these mines.
2660. Is it not a fact that the management rather encourage the men to point out anything that is wrong in the mine? I never heard anything about it.
2661. Had you made any such suggestion, do you think there would have been a black mark put against your name? It is hard to say; there might.
2662. Was it not your duty to mention it if you had such a strong opinion on the matter? The managers ought to know these things themselves.
2663. I did not ask that. Was it not your duty, if you had such a strong opinion in reference to the use of safety lamps, to mention it to the manager or overman? If you put it that way, I might have done so, or any other man.
2664. While you were working there have you heard any other men say that they thought safety lamps ought to be used there? Yes, my mate, Joe Johnstone said so.
2665. He was one of the victims? Yes.
2666. How long before his death did he say that? When we used to have a talk about it. I cannot mention any dates.
2667. Did you ever hear anybody else? Nobody else.
2668. He was the only man you ever heard make the suggestion that it was unsafe to work with naked lights? Yes, he was the only man.
2669. Now, with reference to the falls; do you know of many falls taking place in the dip? No; I cannot swear that there were falls.
2670. And yet you were so much afraid of them? I had sufficient reason to be, I think, too.
2671. Why had you sufficient reason to be? The waste in the dip; that is the reason. I said before that a fall might happen any time.
2672. But do you not know, as a matter of fact, that little or no gas was found in that part of the dip in which you were working? I used to hear there was gas. I never saw it.
2673. *By Mr. Glassey:* What sort of work were you doing when you first went there six months ago? I was working on the level.
2674. Was that on the whole coal? Yes.
2675. How far was that from the bottom of the dip? Fifty or sixty yards.
2676. How long did you continue on that? I think I was there about three months.
2677. Was the late Mr. Johnstone always your mate? Yes; they were working double shift—Gambie and Griggs on one and Johnstone and myself on the other.
2678. Had anyone been there before you? Yes, there was a fellow left, and I got his place.
2679. The mate of Johnstone? Yes.
2680. When you went there did you hear your mate say he had previously observed gas in the mine? Yes; he lit it up to let me see it in the corner.

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2683. You saw gas two or three times while you were working in the level during those three months? Yes.

2684. At the end of that time where were you working? We were driving up the whole coal.

2685. How long did that continue—was that a room? Yes, four of us were working the day shift on it.

2686. What was the width of that room? Twenty yards.

2687. Did you work double shift? No, four on the day shift.

2688. How long did that whole work continue? I could not tell you.

2689. During the whole time that you were working in that room off the level did you ever see gas? No.

2690. Was the ventilation good there? Yes.

2691. How long were you working on the pillars? I think we worked six days and nights, and then went on to the pillars.

2692. So you were only about a fortnight on the pillars? Yes; hardly a fortnight.

2693. Now, during the six months have you heard men complain, from time to time, of gas being found in various parts of the dip? Yes, I have heard them talk about it—not complain altogether.

2694. Did you hear them say there was a large quantity of gas? No, not a large quantity.

2695. While working on the pillars, did you hear them express any fear that there might be falls any day? Just amongst ourselves.

2696. On the occasion that you were stopped working were you in the level or in a room off the level? In the level.

2697. Mr. Sharp, the manager, had examined the place? Yes, we stood at the top of the dip until he came back.

2698. And you don't know how far he went? Well, he went into the room, I suppose, and he came back and told us to go back.

2699. Was there not a possibility that he did not get as far as the room before he discovered gas? I could not say.

2700. But there is a possibility? Yes.

2701. He merely told you that it was better for you to go home, as he had discovered gas and it was hardly safe to work? That is about what he meant, I suppose.

2702. What did he say? There was gas there, or we would not have gone home; there must have been gas there.

2703. Was it usual for the fan to stop on Sunday? I never took any notice of it, whether it went on a Sunday or not. I think it starts at 10 o'clock on Sunday night, or somewhere about that.

2704. What time on Sunday night was that? Ten o'clock.

2705. Did you ever work any Sunday night but the one in that mine? Yes, several.

2706. And that was the only time you were stopped from working in consequence of gas having been discovered? Yes.

2707. Did the manager say that the gas being there was owing to the fan having been stopped? No.

2708. He merely said he had discovered gas, and it would be better for you not to work during that shift? Yes.

2709. He did not say there was any quantity of gas? No.

2710. During the time you were on the pillars were you on more than one pillar during that fortnight or three weeks? I was taking a piece off the side of those that were left.

2711. How far was that from the dip? On the top side.

2712. You were working below the Houstons, were you not? Yes.

2713. How far down? A pillar down.

2714. Were the pillars in-by from you? To the right; down below they were all taken out, barring a little one now and again.

2715. And you had reason to apprehend gas in those excavations? I had not seen them.

2716. You had reason to apprehend the danger of gas having accumulated there and of falls taking place, the concussion of which would force out the gas? That was my fear.

2717. Was your mate an experienced miner? Yes, a practical miner.

2718. How long had he worked at mining? He was forty-five years of age, and had been in the mines in Scotland from the time he was a lad.

2719 How long was he in Torbanlea, do you know? I do not think it was twelve months.

2720. Have you ever known the men to hold any meetings, and to express a fear that it was not safe to go down the mine? No.

2721. Then the statement that that had occurred is not true? It may have occurred, but I did not know anything about it.

2722. You took part in no such meetings? No.

2723. Was there any expression of fear on the part of the men the day you last worked in the mine, or on any day prior to that? No, I never heard anybody mention it, only two or three of us among ourselves; that is all.

2724. Was that expressing some fear that there might be an accident? Expecting that something would happen some of these times.

2725. What did they expect would be the cause of that happening? Gas exploding.

2726. Gas lurking where? In the dip.

2727. In the old workings? Yes.

2728. *By the Chairman:* You say two or three of you spoke of that? Yes, three men.

2729. When I asked you about the matter before you said only one? One in particular I spoke to, my mate especially.

2730. *By Mr. Glassey:* Supposing safety lamps had been used in taking out those pillars where gas had previously been discovered, would you yourself have apprended danger? No, not if I had a safety lamp.

2731. You did apprehend danger, didn't you? Yes, with a naked light.

2732. Was that one of the causes which led you to stop away from your work? Yes, it was one of the causes.
2733. Was it the main cause? No, I did not care whether I worked there again or not; but I did not leave.
2734. Was it your intention to have gone back the day following the accident? Yes it was.
2735. Did you ever hear Mr. Johnstone, or any of your mates, express a fear that something would happen? Yes.
2736. Were they threatening to leave the mine? Johnstone used to say, "This month will finish me here."
2737. *By the Chairman:* Wasn't it known that the mine was going to stop on the Saturday? Going to stop on the Saturday?
2738. Yes, going to be closed on the Saturday—that they would be working only two days more before they closed the mine up? Not that I know of.
2739. *By Mr. Glassey:* Did you hear any statement made by the manager or overman to the effect that it was their intention to close the mine on the following Saturday? No.
2740. Was any intimation of that kind made to the men? I never heard about it; the first I have heard about that is what I have heard now.
2741. Then, the statement that it was the intention to close the mine is an untruth? I could not say.
2742. At any rate there was no announcement made to the men, verbally or in writing, that the mine was to close on the Saturday? Not that I know of; there might have been, but this is the first I have heard of it.
2743. *By the Chairman:* You were always about the surface in the morning, before going down, and would see anything that was going on—if there was anything being removed or taken away? Yes.
2744. Were they removing one of the boilers at the time? I think I did see them taking the bricks off a boiler.
2745. Taking away the bricks and taking the boiler away? Yes.
2746. That was before the accident? I would have to study that; I have been at the pit several times since, and it might have been then.
2747. *By Mr. Glassey:* Was your mate, the late Mr. Johnstone, killed right out? No.
2748. How long did he live after the accident? Till about 3 o'clock the next day.
2749. Do you know whether he was sensible? I was not there.
2750. You didn't go to see him? He had been dead about two or three minutes when I went to see him.
2751. Do you know if any depositions were taken prior to his death? No; I do not think there was.
2752. In your opinion, where gas has previously been seen safety lamps ought to be used in the removal of a range of pillars near the waste? Yes, they ought to be, after this.
2753. I think you said the ventilation of the mine was good? Yes.
2754. And that there was every reasonable care taken by the management for the safety of the men? Yes.
2755. *By Mr. Rankin:* When you answered the question put to you by the Chairman, did you mean that safety lamps ought to be used whether gas had been seen or not? Yes.
2756. *By Mr. Glassey:* When pillars are being removed in a mine where gas has not been seen, do you think safety lamps should be used then? I do not think so, if no gas has been seen there; the safety lamp is only in the way where it is not needed.
2757. Then it is only in a mine where gas has been previously seen, and where pillars are being removed near the waste, that, in your opinion, it would be well to use safety lamps? Yes.
2758. *By Mr. Rankin:* You say that two of your mates, repeatedly, I suppose, said they anticipated danger, working there? Yes.
2759. That it was not safe, but not that they were going to leave? No, not that they were going to leave, but Johnstone said it was his last month there.
2760. What do you think he meant by that—that he was going to leave? Yes.
2761. Did the others anticipate an explosion? Yes.
2762. They never reported that danger to Mr. Sharp? We thought he knew it as well as we did.
2763. Don't you think it was your duty to have told him that gas had been seen there on various occasions, and that he ought to have provided you with safety lamps? It would have been a good job if some of us had done that; it might have saved this accident.
2764. But don't you think it was your duty, where you knew your life was in danger and a remedy was at hand, to have intimated it to Mr. Sharp? I think he should have been told, but we did not tell him.
2765. You were aware that they had safety lamps at the mine? I took one in one morning.
2766. When was that? The morning the fan was stopped. I came to Gambie to go round the workings and see if there was any gas, and he found it was all right. He said then, "What will we do"? I said, "I will go home for one." Six of us came out. The Houstons went first and four of us went after.
2767. *By Mr. Glassey:* When was that? I cannot tell the date. It was one day the fan was stopped. Only six of us came up.
2768. You are not speaking of the Sunday night? No; I am speaking of the day something went wrong with the fan.
2769. *By Mr. Thomas:* Did you have any conversation with any of the men after the explosion? No; I just went in to see how they were getting on. Three of them were dead, and Houston and Gambie were living.
2770. I believe that some of them were conscious for some days after? Oh, yes.
2771. *By Mr. Glassey:* Do you know of any persons who spoke with the men in the hospital before they died? Yes; some friends went to see them. There was Gambie's father, and the Whitworths, and Hurd, and Griffen.
2772. *By Mr. Fryar:* You told us decidedly and without reservation, that whenever pillars were being taken out safety lamps should be used? I meant if gas had been seen in the mine before.
2773. I do not know what you might mean, but you certainly did not say so. Afterwards, towards the close of Mr. Glassey's examination, you abandoned that opinion and gave another one? A fellow gets bamboozled sometimes.

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2774. Your mate, Mr. Johnstone, was forty-five years of age, and he went into the mines when a boy. Consequently we might fairly assume that he had been a miner for about thirty-five years? About that.
2775. During those thirty-five years, do you think he would have any experience of gas, or that he would know when it was safe and when unsafe to work? You would think his opinion would be the same as mine—that safety lamps should be used.
2776. Do you think thirty-five years a sufficient length of time for a man to gain experience and know when a mine was fairly safe or when it was decidedly dangerous? I should think so.
2777. And you say that Johnstone expressed the opinion that it was dangerous? Yes.
2778. Now, would a man unnecessarily risk his own life and those of his fellows without ever mentioning to the overman or manager that he apprehended danger; is it likely? He would be just the same as I was; he had it in his mind that something might happen. I do not believe he said anything to anyone except me.
2779. But do you think he ought to have known when there was more than ordinary danger? He did know; but he did not speak to the manager.
2780. Are you aware that in the Mining Act of 1898, at present in force, there is a clause which gives miners the right to go and examine the mine at any time if they apprehend danger? Yes.
2781. Then, have you miners at Torbanlea ever taken advantage of that right which is given by the Act? No; I do not think so.
2782. There is another clause which provides that, danger or no danger, two of the men and the manager—if he chooses to accompany them—may examine the mine. Has that ever been taken advantage of by the miners? No; not in Queensland.
2783. You have never known them to take advantage of that clause in the Act? No; I have never known them do it.
2784. Have you ever heard of Mr. Sharp, the manager, or Mr. Caldwell, the overman, being cross with the men because they suggested there was any danger? No.
2785. Do you know whether any men have suggested danger to either of them? No.
2786. If very serious danger existed, do you think the men, either individually or collectively, would speak to the manager or overman? No, I do not think they would.
2787. Do you think the miners here are so kept under thumb that they dare not mention to either the overman or manager when they apprehended serious danger? I do not think they would mention it.
2788. Do you think the men would be punished if they made such a suggestion? I do not think they would be, altogether—not in some cases.
2789. Do you think it would be tremendously to the interest of managers to be cautioned against such accidents as that which happened at Torbanlea? Yes, I do.
2790. And consequently they would not be likely to reprove men who made such suggestions? No.
2791. You were working down in the pillars during the last couple of months? The last fortnight.
2792. You know generally what quantity of the pillars were removed and what were left? I do not know what was removed below where I was working, because I was never out of our own place.
2793. All you worked from was the level right up to the level above? We did not go through.
2794. You left a small pillar? Yes.
2795. Then where Gambie and the Houstons and the others were working were there very large pillars to take out? Not very large. Not the one I was on. I do not know what the others were like.
2796. Could you give a rough guess as to the length and breadth? Eight or 9 yards wide at the widest and 20 yards long on the top.
2797. And how many were working on that pillar? Four.
2798. Was the pillar above any great size—the one the Houstons were working out? I could not say.
2799. All the other nine were working in the upper pillar next to the main level? There were men above, but I never saw them working at the pillar.
2800. I mean the pillars on the main level? There were some men, I believe, working there.
2801. At any rate you know there were more men on a pillar above where you were working? In rooms or pillars.
2802. Do you know how much coal was standing to be worked before the dip was done? I could not tell.
2803. You were not aware that in two or three days the pillars would be exhausted in the dip? No, I do not think so.
2804. Suppose the manager knew, would it be his duty to give the men a week's notice that the place would be exhausted in that time? It is doubtful whether he would or not. I do not suppose he would study them.
2805. There would be no compulsion? No; he could do it or leave it alone.
2806. Consequently, if we had it in direct evidence that the statement had been made by the manager before the explosion, you do not think that would be got up specially because there was going to be an explosion—would you think it was a lie? I never heard anything about it.
2807. If we had it in direct evidence that the pillars were about exhausted, would you think that story was got up just for show afterwards? I do not know what to think about that.
2808. Do you think the manager and overman so untrustworthy that you would not believe such a statement? They might have been thinking of closing the mine on the Saturday, but they would be longer if they took the pillars out.
2809. At any rate, if the men stated that they had come to that conclusion, and that that instruction had been given, you would know whether to believe it or not. Would you think it was true, or that it was got up for the occasion? I think I will leave that alone.

WILLIAM THOMAS JONES, miner, examined:

W. T. Jones. 2 May, 1900.

2810. *By the Chairman:* You are a miner? Yes.
2811. Where are you working now? At the Queensland Collieries.
2812. How long have you been working there? Three years next August.
2813. What experience have you had in coal-mining previous to that? I had a good few years in mines.
2814. How many? About twenty-five years.

2815. That is in coal-mining? Yes.
2816. Have you ever worked in coal mines in the old country? No; never.
2817. Then the whole of your twenty-five years' experience has been in the colonies? Yes; in Queensland.
2818. In what parts of Queensland have you worked? At Ipswich.
2819. How long were you on the Ipswich coalfield? All the time, except the time I have been here.
2820. What time have you been here? Two years last August.
2821. Then you have been twenty-two years in the Ipswich district? Yes; I have been more than twenty-two years there, and a couple of years in New South Wales.
2822. At any rate; your experience as far as coal-mining goes is confined to Australia? Yes.
2823. What collieries have you worked in in this district? I worked seven shifts at Burrum, and the rest of my time I have been in the Queensland Collieries.
2824. Have you ever worked in Torbanlea Colliery? No; never.
2825. Where were you on the day the accident took place in Torbanlea? At the Queensland Collieries.
2826. Where do you live—in Howard or in Torbanlea? In Howard.
2827. There is a letter in the *Maryborough Chronicle* of the 24th of April, signed "W. T. Jones, Pansy Cottage, Howard." Is that from you? Yes.
2828. In that letter you say—

1. I have been informed by the Under Secretary, Mr. A. P. McDonald, that the Commissioners are appointed to inquire into the disaster?

Yes.

2829. And—

2. There is general disappointment in this district at the evidence and verdict of the late inquiry, and many would like to see the inquiry reopened for the good of the public.

What do you mean by "general disappointment"?—Who expressed "general disappointment"? The people in and out at many places; they were not satisfied.
2830. You say, "general disappointment." Did any of the public Press take the matter up, and say they did not think the inquiry was a proper one? I did not notice that they did.
2831. They generally express public opinion fairly well, don't they. Pretty well.
2832. Well, what do you mean by "general disappointment"? Just among the inhabitants of the district.
2833. Do you mean by the "inhabitants" all those whom you have happened to meet? I have heard them discussing the matter in different places.
2834. You go on to say—

3. The fan at the Torbanlea mine was commenced to be taken down the next day after the explosion, and landed two days after the explosion at the Burrum mine; this should not have been done until the inquiry was finished on the accident?

I contradicted that.
2835. But what made you make that statement? About the fan being taken away?
2836. This was written on the 24th of April, or over a month after the explosion took place. When you had a month to find out the facts, what made you make that statement? I heard that that was the case.
2837. You heard that the fan was taken down two days after the explosion? That it was commenced to be taken down.
2838. You only heard it? Yes.
2839. You were not at Torbanlea at all to see for yourself? No, I was not.
2840. Of your own knowledge you do not know whether the fan was taken down then, or that it was taken down at all? That is what I was told—that it was commenced to be taken down.
2841. But you did not say you heard it. You said the fan at Torbanlea was commenced to be taken down? Yes, I was informed.
2842. And do you think that is sufficient evidence to write to the paper on a serious subject like this?—You say of your own knowledge it was commenced to be taken down. Is it true what you state here, that it was commenced to be taken down the next day after the explosion? By what I was informed.
2843. But you do not state here that you were informed anything. You speak as if of your own knowledge. You put it down as a statement of fact—"The fan at Torbanlea mine was commenced to be taken down." There is no statement that you were told. When you stated that as a fact you did not know whether it was correct or not? Only what I was told.
2844. When did you first find out your mistake? When I contradicted it—when I made that statement.
2845. When did you find out that you had made a statement that was not correct? I did not find out.
2846. Then how did you correct yourself? I said the fan was shifted and taken to Torbanlea after the explosion, but as a matter of fact it was two days after the inquiry.
2847. When did you find out that it should have been after the inquiry instead of after the explosion? The day the paper was issued.
2848. How did you find that out? By the paper. I did not keep a copy of my letter. I do not know whether I or the editor made the mistake.
2849. You knew that it was not taken down? Not taken away.
2850. When did you first know that the fan was taken down after the inquiry, and not after the explosion? Because I knew that the fan was down at the inquiry.
2851. You said on the 24th April, the date of your letter to the editor of the *Chronicle*, that the fan was commenced to be taken down the day after the explosion? Yes.
2852. In the paper of the 25th April you correct that, and don't say when it was commenced to be taken down, but you say it was delivered at the Burrum two days after. These statements are quite different. When did you get the correct information?—When did you find out you were wrong? I did not find out I was wrong. Instead of being two days after the explosion it should have been two days after the inquiry.
2853. You knew that it had not been taken down until after the inquiry. You found you had made a mistake? I meant that the fan was not taken away until after the inquiry.

W. T. Jones. 2854. When did you know first that the fan was taken away—after the inquiry?—Was it simply a mistake in the printing or in the writing of the letter? There was no mistake in writing the letter.

2 May, 1900. 2855. Then, when you wrote the letter on the 24th, you thought the fan had been taken down and delivered at the Burrum two days after the explosion? I knew that was a mistake when I read the letter.

2856. And for how long had you known the proper time that the fan was taken away. You make a statement, and you say now you knew that it had been taken away after the inquiry. How long had you known the fact that it was taken away after the inquiry and not after the explosion? A week last Sunday that it was taken away and landed at the Burrum.

2857. But you knew that was a mistake directly you read the letter? Yes, it should have been two days after the inquiry, instead of two days after the explosion.

2858. That is published on the 24th. On the 14th of April, or ten days before you wrote to the Secretary for Mines? Yes.

2859. You make much the same statement there. You say—

> Dear Sir,—I beg leave to write a few lines to you to draw your attention to the Torbanlea explosion. Are you acquainted with the fact that the said fan was taken down when the four practical miners went down to examine the said mine when the explosion occurred? If it was not safe for the men to work without the fan, was it safe for the said four men to go down the mine?

There you make the statement again that it was taken down and taken away before the inquiry? Yes.

2860. How is it you made that statement twice within ten days, and then suddenly find out your mistake? Because I wished the Minister for Mines to draw the Royal Commission's attention to it.

2861. But it is not a fact. You wrote on the 14th that it was taken away. Ten days afterwards you wrote to the paper still to the same effect. Did you not find out your mistake before?—Did you not know when you wrote on the 24th that the fan had not been taken away until after the inquiry? No.

2862. Did you know that when you wrote, on the 14th, that the fan was taken away? Yes, I heard that it was taken away last Sunday week.

2863. Yes, but you state here that it was taken away a long time before that; you found it out after you had written the letter of the 24th of April, and you wrote the same thing on the 14th—you twice made a statement which you now say was not true—at any rate, the statement which you made in your letter to the Minister on the 14th and in your letter to the newspaper on the 24th you had to deny on the 25th April; isn't that a fact? No.

2864. Then, why did you deny it on the 25th? I did not deny it on the 25th; I only made a correction.

2865. And you made the same mistake in those two letters, one to the Minister and the other ten days later to the Press? I did not make a mistake.

2866. It is a serious matter to make statements like that.—Did you make that statement really knowing nothing at all about the matter; had you really no personal knowledge of it, or was what you said about the removal of the fan only hearsay? I heard it.

2867. And you never took the slightest trouble to find out if what you had heard was true? The jury told me that it was taken down.

2868. You not only say that the fan was taken down, but also that it was landed two days afterwards at the Burrum? Yes.

2869. You did not know that of your own knowledge? No.

2870. In that letter to the *Chronicle* you further say:—

> 4. I should like to know how the Royal Commission is going to examine the said mine without the fan; that is, examine it properly for the jury of miners that went down before could not examine the mine as to the quantity of gas, for it was too strong for them with the lamps they had at their disposal.

Where did you get that information? One of the jury told me that they went to examine the mine, but the lamp got too hot.

2871. Did he tell you that it was impossible to examine the mine on account of the quantity of gas? He said the lamp got too hot.

2872. That is another thing altogether.—Did he tell you they could not examine the mine; as a matter of fact, did they examine the mine? They went down for that purpose.

2873. I did not ask you that. You say here that they did not examine it? I do not say they did not examine the mine.

2874. You say, "The jury of miners that went down before could not examine the mine as to the quantity of gas, for it was too strong for them with the lamps at their disposal?" They went down, but could not go to the place they wished to go to, because the lamp got too hot for them.

2875. How did you know that? Because one of the practical miners told me.

2876. Then that also is hearsay? It is what he told me; that is all I know.

2877. Is it hearsay? Yes.

2878. Would you be surprised to hear that not one of those men have made that statement, though they have been examined before this Commission? Would it not have been better for you to have left it to the men who went down the mine to report such a thing themselves? Perhaps it would.

2879. But you knew more about it than they did themselves? No.

2880. Is it true that they went down the mine? I was not there to see.

2881. So that all you have written is mere hearsay; it is simply what you have been told, and you do not know anything about the matter of your own knowledge? No.

2882. *The Chairman:* Well, after that statement, I do not think it is worth while continuing this examination.

2883. *By Mr. Glassey:* During the time you were working at any of the mines in the Ipswich district did you have any experience of gas? I have seen gas lighted.

2884. In a mine? At a place they call the Granite Pit, near Waterstown.

2885. At any rate, you yourself have had very little experience of gas? Yes; the first man that was ever burnt in a Queensland mine was burnt there, I believe.

2886. Since you came to this district have you seen gas at all? No.

2887. Touching the matter which the Chairman has examined you upon, are you in the habit of corresponding with the newspapers from time to time? Yes, at different times.

W. T. Jones. 2 May, 1900.

2888. You are not a paid correspondent? No.
2889. Do you correspond with any other newspapers beside the local press? I write occasionally to the Ipswich *Queensland Times*.
2890. I suppose newspaper correspondents invariably write on knowledge which comes to them from outside sources? I believe so.
2891. I suppose they do not always write on subjects of which they themselves are thoroughly cognisant, but that they get information from other sources? That is the way they generally do it, I believe.
2892. The matter which you communicated to the newspapers you heard discussed among the men themselves? Yes.
2893. Among the Torbanlea men? No; one was a Burrum man.
2894. And thinking that the information which had reached you was correct, you communicated what you had heard to the newspapers? Yes.
2895. When you wrote that letter, which you afterwards corrected, did you see at once that you had made an error? That there was an error in the letter.
2896. And you immediately corrected it? Yes.
2897. Did you do that without any person giving you any further information? Yes.
2898. Did you write that the fan had been removed two days after the explosion, or, rather, two days before the visit of those miners who were on the judicial inquiry? Two days after the inquiry I wrote that the fan was being taken away.
2899. So that your second letter was merely a correction after you saw the error which had appeared in your first letter? Yes.
2900. And that was not in consequence of further information which had been given you? No; I wrote that, and put my name to it, so that people would know who I was.
2901. Do you still adhere to the letter which you wrote to the Department of Mines, and to the statements contained in it? On the 14th of April?
2902. Yes? Yes; I have a copy of it here.
2903. Then the statements made there are true, according to the information given to you? Yes.
2904. You say that one of the four men who constituted the judicial inquiry, and who examined the mine, informed you that they were unable to examine the mine in consequence of the lamp they were carrying being too heated? They said the lamp got too hot to go any further.
2905. Did they say they would have gone further if the lamp had not been too hot? They did not say that, but I am sure they would.
2906. Which of the men made that statement to you? Mr. Roderick.
2907. Had you conversed with many of the Torbanlea men before the explosion? No.
2908. Or immediately after the explosion did you converse freely with them? Not with many of them.
2909. How many of them would you say you conversed with? There is one that I know I conversed with lately.
2910. Did that one say that prior to the accident there was any danger apprehended in the dip where the accident actually took place? He did not mention that in my hearing.
2911. So that, as a matter of fact, prior to and subsequent to the explosion you have not conversed very freely with the Torbanlea men themselves? No.
2912. Therefore you are unable to say, from statements made to you, that there was danger apprehended before the explosion took place? No, I could not say that.
2913. Have you heard it stated that the men had at any meeting discussed whether it was safe for them to go down the mine before the explosion occurred? No.
2914. *By Mr. Fryar:* In paragraph No. 2 of your letter to the *Chronicle*, you say—

> There is general disappointment in this district at the evidence and verdict of the late inquiry.

Where could we see that verdict? I don't suppose you would see it at all.
2915. But you had evidently seen it? I had not. What I say there is what was circulated among the people here at different places.
2916. I want to know where you got to know about the verdict? I wrote what I heard.
2917. Never mind what you heard. You say in this letter:—

> There is general dissatisfaction in this district at the evidence and verdict given at the late inquiry.

I want to know where we could see this verdict and what the verdict of those four men was? I never heard the verdict.
2918. You never heard it? No; not the verdict. I heard it mentioned when people were talking.
2919. There has been no verdict published that you have seen? No.
2920. Have you heard of any? No.
2921. *By the Chairman:* Do you know what it is? The verdict?
2922. Yes? The conclusion they came to.
2923. What is their conclusion? I do not know, because I have not heard it.
2924. *By Mr. Fryar:* If you could not get to know what the verdict was, how could other people get to know. You say you are a newspaper correspondent, and you would be as likely to know as others. Did you know anything about the verdict when you wrote that paragraph? No.
2925. Look at that paragraph, No. 5.—

> The question was asked at the inquiry if the fan was going then, and the answer was "Yes."

Who asked that question? You did.
2926. Who gave the answer? Mr. Sharp.
2927. And you go on to say, "which was incorrect"? Yes.
2928. Are we to suppose that Mr. Sharp deliberately said "Yes" when he knew that the fan was lying at the Burrum coal pit? Because that is in the same letter? Yes; that is in the same letter, but you must not understand it.
2929. Give us your explanation of it, then? You say you asked that question in the court that day.
2930. So you say. I did not say so. I will take your word for it? I have witnesses to prove it.

W. T. Jones. 2 May, 1900.

2931. I am not denying it. You say—

> The question was asked at the inquiry whether the fan was going then, and the answer was "Yes," which was incorrect.

Are we to believe that Mr. Sharp would deliberately tell us that the fan was going at Torbanlea when he knew he had it lying in the yard at the Burrum; because you say in the same letter that it had been brought over the second day after the explosion? The second day after the inquiry. I said in my letter that it had been taken away two days after the inquiry.

2932. What letter?—Do you mean to say that you wrote that it had been taken away after the inquiry? Yes.

2933. And the paper transposed it to say two days after the accident? No, they did not transpose it. In the first letter it was two days after the explosion, and I corrected it.

2934. *By Mr. Glassey:* But it should have been two days after the inquiry in the first letter? Yes.

2935. *By Mr. Fryar:* But did you write this as it was published at the time? Yes, I wrote it, but made a mistake in the one word.

2936. *By the Chairman:* You made a mistake? I do not know whether I did or the editor.

2937. You made a mistake in the same word when writing to the Minister for Mines ten days before? Yes.

2938. *By Mr. Fryar:* I want to know whether Mr. Sharp has misled us at this inquiry. If Mr. Sharp deliberately told us that the fan was going, and all the time it was lying at the Burrum, what are we to make of his evidence. You wrote that the fan was commenced to be taken down the next day after the explosion, and landed two days after at the Burrum. In that same letter you tell us the question was asked, "If the fan was going then, and the answer was 'Yes,' which was incorrect." Are we to believe that Mr. Sharp would deliberately tell us that untruth? I do not know. You asked the question.

2939. Is that your meaning? My meaning is that you asked a question in the court. You asked if the fan was going, and the answer was "Yes." The four miners, when they went over to examine the mine, told me that the fan was down. They examined it the next day after the inquiry.

2940. But you miss the point. At the very time of writing that you wrote also that Mr. Sharp answered "Yes"—that it was going. Are we to believe, when you wrote that letter, that you believed Mr. Sharp told us it was going when he knew it was in the yard at the Burrum mine? Yes; you asked him that question.

2941. That is not the point at all. Do you think Mr. Sharp gave an answer of that kind, knowing that the fan was lying in the yard at the Burrum at the time? I do not know whether he did it intentionally. It could not have been at the Burrum, because the letter says "two days after the inquiry."

2942. The letter does not say that? Yes; the correction does.

2943. I am speaking of this other letter. I want to see if I can reconcile those two paragraphs? Instead of "two days after the explosion" it should have been, "two days after the inquiry."

2944. Then why do you say "two days after the explosion"? That is an error, and it is corrected in the next paper.

2945. Then is the No. 5 paragraph an error, too, because they were both written at the same time?—"The question was asked at the inquiry if the fan was going then, and the answer was 'Yes,' which was not correct." It would be incorrect if the fan had been taken to the Burrum? I do not say it was taken to the Burrum.

2946. Of course you don't. You don't say anything that was a fact. You next say, "Many miners would give evidence if they were served with a subpœna." Are the miners so trodden under foot here that they dare not come and give evidence without being served with a subpœna? I do not think so—not in this part, anyway.

2947. In any part where you have been in Queensland? Not that I am aware of, but you see plenty would come with a subpœna, but would not come without.

2948. You say again, "I should like to know how the Royal Commission will examine the mine without a fan?" Did you make any inquiry about that? No, but experience tells me that when the current of air is cut off it is impossible to examine a mine as well as with a strong current of air.

2949. Then, no matter what the Commission did, your experience teaches you that they could not do it rightly? Not at all.

2950. "I should like to know," you say, "how the Royal Commission will examine the mine without a fan." Do you believe they did examine it? I will leave that to the Royal Commission. I was not there to see what the Commission did.

2951. If you wanted to know whether they examined it you could have gone and seen? I believe they went down and examined it.

2952. Do you think that the Commission did it properly? They could examine it far better if the fan had been going, and there was a certain current of air travelling.

2953. We could not find gas so well if there was a certain current of air. Do you believe they examined it at all? Yes; I believe they examined it.

2954. But you do not think they examined it properly? I could not say anything on that question. I believe they did their duty.

2955. You say—

> I think the Commission should inquire into the overwinding accident at the Burrum River Colliery.

Who authorised you to allot certain work to the Commission which they were not empowered to undertake? When they were here I thought it their place to investigate these things in case of further accidents occurring.

2956. If they were not authorised to do it, what then? I was only drawing attention to that accident.

2957. You go on to say "it was a mere miracle." What is a miracle? Something wonderful.

2958. "It was a mere miracle that there was not another calamity. Thank Providence it was averted." I want to know what you mean by "a mere miracle." I suppose if you were writing a letter like this to the papers, and it took away a man's character, you would say it was "a mere trifle"? Oh, no, I would not.

W. T. Jones. 2 May, 1900.

2959. How would you use that little word "mere." Supposing we told a witness that he was a "mere nonentity," would that be a correct way of using the word. Can you tell us that. It is an extraordinary jumble to talk about "a mere miracle." Have you anything to say on that point and what do you mean by saying "it was averted." What was averted? A further accident.
2960. Were these the only letters you wrote to the paper on the subject—the first letter and the correction? I wrote one before about the mine.
2961. To the *Maryborough Chronicle*? No, the *Wide Bay and Burnett News*.
2962. Was that as truthful as this one? I do not think there was anything untrue in it; I was simply asking questions.
2963. But when you say "there is general disappointment," that is not a question, nor is the statement about the fan being removed a question—you have not told us anything that was in that letter? If you wish to see what was in the *Wide Bay News* I will give it to you to read.
2964. How many letters did you write to the Minister? I wrote two.
2965. And what was the object of the other one? In the first one I wrote I asked for permission to be at the inquiry, and you answered it; I have a copy of it here.
2966. You asked to be allowed to attend the inquiry—what was the answer? The answer was that "The court will be glad to hear any evidence that may be tendered touching the matter of the inquiry; the parties interested may be represented by counsel or attorney, but it is not open to the public at large to interfere on such occasions."
2967. That would not prevent you being at the inquiry? No.
2968. It rather invites you to be there? Yes; I was there.
2969. You did not volunteer any evidence? I had to leave and go away by the train, so I could not; I had no evidence to give.
2970. You merely went to usurp the functions of the court on that occasion? No; I merely wished to be there.
2971. You wanted to ask questions? Yes.
2972. Hadn't you any faith in the police magistrate of Maryborough and the four men who were chosen to sit with him on that occasion? Oh, yes; I had quite faith in them.
2973. But you didn't think they were competent to do their duty? I never thought anything of the kind.
2974. Then, why did you ask permission to ask questions? I thought I might be able to bring out something that had escaped notice.
2975. You did not succeed in usurping the functions of the court on that occasion, and now you try to usurp the functions of this Commission—isn't that it? No.
2976. It looks like it? I don't think so, seeing that I was the first to write to the Press asking for a Royal Commission to investigate the matter.
2977. Why, then, did you write that letter to the Press after the Royal Commission had been appointed? —I suppose the work could not be done without your assistance? Oh, yes, it could be done without me; you have got the pick of the colony, I believe.
2978. You say, at any rate, that you are the "Practical Miner" who wrote that letter to the *Wide Bay News?* Yes.
2979. Do you think from the wording of that letter that it was necessary to tell anybody that you were a practical miner? No, but I just put that down.
2980. Did it ever occur to you that, if you had suggested it, any of the four miners who sat at the inquiry would have asked any questions you wished, if they had been pertinent? No, I did not interfere with them.
2981. Can you tell us now what questions you would have liked to ask that were not asked at the inquiry? No, not now.
2982. You used some pretty strong expressions in that letter to the *Wide Bay News* respecting the carelessness of the manager or somebody or other? I mentioned nobody's name.
2983. I am aware of that, but is it not a fact that you used some pretty strong expressions in that letter? I do not see that I made use of any strong expressions whatever.
2984. And because you could not get to question the witnesses yourself you would not give the warden the benefit of your knowledge? No.
2985. You have nothing to tell us that would be of any advantage to the community in reference to this explosion? No, nothing that I am aware of, because I never worked at Torbanlea.
2986. *By Mr. Glassey:* In applying for permission to ask questions at that inquiry, what object had you in view? I heard that the inquiry was going to be held with closed doors.
2987. In asking permission from the Mines Department to be present at that judicial inquiry, did you think that there might be something crop up during the inquiry that the four practical miners might omit to elucidate, and that you might take hold of? Yes, I thought there might.
2988. When you were present at the inquiry were you near enough to the bench to prompt the jurors what to ask? No, I was sitting right back.
2989. Had you any facilities to prompt any of the four men who constituted the bench? Well, I spoke with them after dinner.
2990. Were they in an elevated position in the court, or how were they placed? They were sitting on a level at the top of the hall.
2991. And you were not near enough to suggest any question you wished to be asked? No, I could not get at them from the back.
2992. *By Mr. Fryar:* Were you there in the forenoon? Yes, I was there till 4 o'clock.
2993. Consequently you would have an opportunity of consulting with any of the men sitting with the warden? I was there both in the afternoon and in the forenoon.

WILLIAM KEENE, acting manager at the Burrum Colliery, examined:

W. Keene. 2 May, 1900.

2994. *By the Chairman:* I believe you are acting manager at the Burrum Colliery? Yes.
2995. What is the name of that colliery? River Bank Colliery, Burrum.
2996. How long have you been acting manager there? I have been there since the 23rd of last May.

W. Keene. 2997. What experience have you had in coal-mining previous to that? I have had about seventeen years.
2998. Any portion of that time in the old country? Yes.
2 May, 1900. 2999. For how long? Three years.
3000. In what part of the old country? North Staffordshire.
3001. What mines were you working in? The Staffordshire Coal and Iron Company's Sideway Colliery.
3002. What length of experience have you had in the colonies? Fifteen years.
3003. Has the most of that time been spent in this district? At Torbanlea.
3004. All of it? All of it, except five months when I was down in the Newcastle district at the Greta Collieries.
3005. Were you one of the overmen in Torbanlea? Yes; from March, 1896.
3006. And since you have been in the Burrum mine you have been overman and acting manager? Yes.
3007. Do you undertake as well the duties of fireman? Yes.
3008. It is your duty as fireman to go round every morning and examine the working places? Yes.
3009. You have done that regularly ever since you held the position? No.
3010. Have you met with any gas in that colliery? There is a small quantity in the abandoned level on the north-west side of the shaft going towards the river, but it is nothing to talk about.
3011. Did you find gas there often? Yes; it lies in the high places, between three and four crowns away, where the air just blows on it under the roof.
3012. You did not find it in large quantities? No.
3013. In the parts of the mine that are being worked now, have you ever seen gas? No.
3014. Not in any of the working places? No.
3015. Nor in any of the waste? No.
3016. The men are not allowed to enter the mine until you have examined it? Yes.
3017. You allow them in before you examine it? Yes; there is nothing to be frightened of; nothing has been seen since I have been there.
3018. And do you examine it after the men have gone in? Yes; I generally go down as soon as the men go down. I am in the places sometimes before the men get there, and sometimes they are all there before I get there.
3019. Don't you think it is necessary that the mine should be examined before the men go in? I do not think so, as nothing has ever been seen there.
3020. Is it not rather late to examine the mine after the men are there? Yes.
3021. Suppose there was any gas there? If there was anything there it would be rather late, but all the old miners belonging to the Burrum that I have talked to have never seen gas there.
3022. But is there not a possibility that gas may occur there any day? Yes.
3023. When you go round you do not only examine for an accumulation of gas? I go round and examine the places to see if everything is correct—both in timber, roofs, and gas.
3024. In your opinion, ought that not to be done before the men enter?—Is it not rather late after the men are there? Well, it has not been done so far. When I was at Torbanlea I used to go round all the working places before the men went down.
3025. Why did you alter that rule at the Burrum? Because we thought it not necessary, as no gas had ever been heard of in the Burrum in any of the present working places.
3026. But there might be dangerous roofs? The nightman always looks round before he comes out.
3027. At what time does he go round? About 1 o'clock.
3028. What time do the men go down? Seven o'clock.
3029. So it is left for six hours without any examination? Yes.
3030. Do you not think, as a matter of practice, it would be far better to go round before the men go down? Is it not the law that you shall go round before the men go down? Yes, I believe it is.
3031. Here is what the law says—

A competent person or persons appointed by the owner, agent, or mining manager of the colliery for the purpose, not being contractors for getting minerals in the colliery, shall, within such time immediately before the commencement of each shift as shall be fixed by special rules made under this Act, inspect every part of the colliery situate beyond the station or each of the stations, and in which workmen are to work or pass during that shift, and shall ascertain the condition thereof so far as the presence of gas, ventilation, roof, and sides, and general safety are concerned.

Has that law been carried out? Not at the Burrum.
3032. For how long have you not been carrying out that law? This last five or six months.
3033. You have been there since May last? Yes.
3034. Has it been carried out since you have been there at all? Yes; I did it for a few months, and then I talked to Mr. Sharp, and he thought it was not necessary.
3035. Now, when in Staffordshire, had you any experience of gas in mines? Yes, a little.
3036. Had you ever worked in mines where men were compelled to use safety lamps? Yes.
3037. Where safety lamps were used only in certain places? All over the mine.
3038. With reference to working away pillars in the neighbourhood of waste, do you think that safety lamps ought to be used if gas has been seen in the mine? Yes, if in any large quantity.
3039. And as to the quantity, how would you judge? By the lamp.
3040. I mean would you leave it to the judgment of the manager? No. If I was fireman I should certainly see what quantity there was, and then I should report to the manager if the quantity of air was not sufficient to clear it away.
3041. You do not think it is absolutely necessary, in every case where gas has been found, to take the pillars out with the aid of safety lamps? No; to a man who has not been used to safety lamps, it is very difficult to work with them.
3042. Are you of opinion that, as a practice, safety lamps should not be used? Not unless there was a large body of gas that could not be swept away with the air. Then I should certainly advocate the use of safety lamps.
3043. *By Mr. Glassey:* But you would do that in any case, whether you were working out pillars or not? Yes.
3044. *By the Chairman:* Where gas is being emitted fairly regularly, do you consider that ventilation could be carried out in such a manner as to carry the gas off? Yes.

W. Keene. 2 May, 1900.

3045. In cases where sudden outbursts or blowers occur, what is your opinion as to the use of safety lamps? What we have done in the old country, and been in the habit of doing at Torbanlea, is this: Gas will always fly to the highest point, and in the levels at Torbanlea we used to hang the lamp up as high as we could get it, and the men used to work with naked lights near the pavement and watch the lamp. As soon as they noticed that the flame was beginning to draw they would know that gas was accumulating.
3046. You were overman at Torbanlea? Yes.
3047. Did you ever notice much gas there? Not in large quantities—nothing to be afraid of.
3048. Did you ever notice it in sufficient quantities to warrant the use of safety lamps? No.
3049. You never thought they were necessary? Not with the quantity of air we had travelling round the working faces.
3050. *By Mr. Glassey:* How long were you at Torbanlea before you went to the Burrum? About fourteen years in the old No. 1 and in the present mine.
3051. Did you work in the dip at all before you went to the Burrum? Yes; I was overman, and it was my duty to go round every morning before the men and examine all the places.
3052. Did you succeed your brother there? Yes.
3053. On his decease you took charge? Yes; after his decease.
3054. At the time you were in charge did you frequently see gas—how often did you see it? Some weeks I would see it once or twice, and sometimes oftener.
3055. Was there a small quantity at the bottom of the dip when a number of men were removed? I could not say. I was not there. That was after I left.
3056. You have only seen gas in one portion of the Burrum mine? Yes; in the north-west level, and that is abandoned.
3057. Is that not to be worked any more? No; not yet.
3058. Is there sufficient ventilation in that particular part to keep it clear of gas? Yes.
3059. So that there is no fear on that score? No fear.
3060. In examining the mine in the morning, did you use a safety lamp? Yes.
3061. That is only used in a portion? Only in a portion.
3062. Have you seen a plan of the mine? No.
3063. How often do you make up your reports? Every day.
3064. Do you keep a book? Yes.
3065. Have you got it with you? No.
3066. After you examine, when do you enter your reports in the book? As soon as I come to the top.
3067. What time is that? All times—9, 10, and sometimes 11 o'clock.
3068. In examining the mine, do you take a notebook with you? No.
3069. Let me suggest that it would be better to carry a notebook and make notes of the exact condition of the working places. That is done in every case in Northumberland in the old country? Yes; that is quite right.
3070. The men have not complained at all about the mine not being examined before they start? No.
3071. Do you think it is the wish of the men that it should be examined before they start? I do not know.
3072. At any rate, they do not object to your present system? Nobody has objected.
3073. *By Mr. Rankin:* Do the men know that the examination is not made before they enter the mine? Yes.
3074. Has that level to which you have referred been started since I was in there? No.
3075. Is it barricaded over? Yes.
3076. Is there no one working in there? No.
3077. Is it barricaded off at the first return where the air goes out? It is barricaded off about 50 yards away from where any of the men go.

(Howard.)

THURSDAY, 3 *MAY*, 1900.

PRESENT:

MR. RANDS	MR. GLASSEY, M.L.A.
MR. FRYAR	MR. RANKIN

MR. THOMAS.

MR. WILLIAM HENRY RANDS, CHAIRMAN.

GEORGE BARKER, miner, examined:

G. Barker. 3 May, 1900

3078. *By the Chairman:* You are a miner, I believe? Yes.
3079. Where do you live? In Howard.
3080. What mine are you working in at present? In the Queensland Collieries Company's Mine.
3081. How long have you been working there? I have been working there ever since they started work. I arrived here eighteen years ago, and I have been working there ever since the mine started.
3082. Had you ever worked in coal-mines before? Yes.
3083. In what place? I worked a little while in the Dudley Mine, Howard, and also in the old country.
3084. Which part of the old country were you working in? In Derbyshire, in the Butley Company's Mine.
3085. What length of experience had you in Derbyshire? I was working there for some few years, but I could not tell you exactly how long.
3086. Roughly speaking, how long do you think you were working there? Three or four years.
3087. At any rate, you have had twenty-two or twenty-three years' experience in coal-mining? Yes.

G. Barker. 3 May, 1900.

3088. Was there much gas in any of the mines you worked in in Derbyshire? There was very little; there was none in the Butley Company's Mine that I know of.
3089. Did you work in any other mine in Derbyshire? Yes, in the Oaks Company's Mine.
3090. Was there any gas in that colliery? Well, I believe there was. I know we used to be stopped going into our places of a morning occasionally, but I never saw any gas at all.
3091. Did you ever work with a safety lamp when you were in Derbyshire? No, never.
3092. Then, in the old country you did not have much experience of gassy mines? No, I had none personally.
3093. In the Queensland Company's Collieries, since you have been working there have you seen any signs of inflammable gas at any time? Not the slightest atom; I never heard of any.
3094. Not in the whole of your eighteen years' experience? No.
3095. You worked in the old No. 1 shaft? Yes; I started the sinking of that.
3096. Was there any sign of any gas there? Never, to my knowledge.
3097. Has it been the custom to have that mine examined in the morning before the men entered? I believe it used to be examined.
3098. Is it examined now every morning before the men go in? Yes.
3099. But you are not sure whether this was done in the olden days? I am not positive that it always was.
3100. For how long past has it been the custom? For some considerable time.
3101. For many years? Yes.
3102. You do not actually know whether it was examined before that? No; I know the shiftmen used to go down early, but whether they examined every place I could not say.
3103. Do you know if any men have ever been kept out of their working places there on account of gas? Never.
3104. And as far as the Queensland Collieries Company's Collieries are concerned you think there is no occasion there to use safety lamps? I do not think there is the slightest occasion to use them.
3105. The mine is examined every morning now before the men go to work, you say. Who examines it? A man who came from Ipswich some time ago, but I do not remember his name.
3106. What position does he hold? That of underground overman.
3107. *By Mr. Glassey:* Is it Mr. David Campbell who examines the mine? Yes, I was not familiar with his name, but that is the name.
3108. *By the Chairman:* Does he use a safety lamp when he goes his rounds in the morning? I could not say; I have never been with him on his rounds.
3109. What do you do? I work in the face.
3110. And before you are allowed to go in the face is there a station where you stop until the place is reported safe? No.
3111. Are you allowed to go to your working places before a report comes from the underground overman? The underground manager gives the order before any man descends the shaft; he goes down before anybody.
3112. He gets a report from Mr. Campbell? Yes.
3113. You are working in the face, you say? Yes, that is generally what I have been working at.
3114. You have had very little experience of gassy mines? I have had none.
3115. Therefore, it is not much use asking you any questions with reference to the use of safety lamps? No.
3116. Speaking generally, have you heard any complaints from the men about the general management of the colliery? No.
3117. Have you ever found anything deficient in the ventilation, or has the ventilation always been good? There are some places where you cannot very well get the air through. Of course the ventilation as a rule has been good. There has been a difficulty sometimes in cutting places through. In the old mine, No. 1, the ground was very bad and rotten.
3118. *By Mr. Glassey:* You mean the roof? Yes; and the floor, too, and of course there have been little difficulties all the time in cutting places through. There has been good air, but you could not always get it to the places where you wanted it.
3119. Why not? Because the air courses would be closed and you would be cutting in through.
3120. Is there no means of taking it up by brattice? It would be a very difficult thing. You asked me if there had been any complaints or little difficulties. To say that there have been none would not be correct. There have been little difficulties that could not be avoided.
3121. *By the Chairmon:* When these difficulties have occurred has the management generally attempted to put them right as soon as possible? Yes; Mr. Rankin has always done so. He has helped as much as possible to keep things right.
3122. In a drive, to take the air right to the face, would you use brattice? Yes; when there has been a want of air we have put brattice cloths up.
3123. Have you any suggestions to make or is there anything you can say with reference to the working of the mine? No; I do not know that there is anything. The old hands particularly have always had liberty to make any suggestions or talk to the manager in connection with the mine.
3124. They have been encouraged to do that? Yes.
3125. And to report anything that they thought was wrong in the mine? Yes.
3126. They have not been at all afraid to mention anything wrong? Not that I am aware of. I know I never was.
3127. Have you yourself ever reported anything? In cases where the timber has given way I have reported it at once.
3128. And was it attended to? Yes; the men on the road attended to it.
3129. *By Mr. Glassey:* Have they ever used strong language at all? No; I do not know that they have. If there were half-a-dozen places wanting attention at once they might. As a rule, we do not get as far as Mr. Rankin; we go to those under him.
3130. *By the Chairman:* You worked in the Dudley for some little time? Yes; and in the old Beaufort.
3131. How long were you in the Dudley? A very little time—at first, when she was opened up.

G. Barker.
3 May, 1900.

3132. Working near the shaft? Yes; she was not far in.
3133. Did you ever see any gas there? No.
3134. Never any at all? No.
3135. How many months were you working there? Not above three or four months.
3136. In the Beaufort how long were you working? A very short time. That was before I came to live here.
3137. That was worked by an underlie shaft from the surface? Yes.
3138. What depth down were you working? I do not know what the depth of the tunnel would be.
3139. Did you see any gas there? No.
3140. As a matter of fact, you have seen no gas at all on this field? No; never.
3141. *By Mr. Fryar:* Is there plenty of black-damp in the Beaufort? When I was there it was just after the drive was put down. I have had experience of black-damp there.
3142. *By Mr. Glassey:* During the eighteen years you have been in the mine you say that, generally speaking, it has been fairly well ventilated? Yes.
3143. But that occasionally, when a place was about to be put through, the air was a little slack, and that there was some difficulty in getting the air there. What difficulty would there be? Well, you cannot get air there unless you have air courses, or a draw for it.
3144. You would have an air course somewhere? Yes.
3145. Then you have that means of taking the air to where the men are working? It would be difficult in some places.
3146. But, generally speaking, the ventilation was fairly good? Yes.
3147. How long is it since they commenced to examine the places in the morning before the men go down the mine? I could not say. I know the shift men go down, and they are supposed to trace the roads as soon as they get down; but whether they go into every place I am not prepared to say.
3148. *By the Chairman:* Of course you have not been there to see? No.
3149. *By Mr. Glassey:* You were not sufficiently long in the Dudley Mine to give us any idea of the amount of gas given off in that mine? No.
3150. So far you have never discovered any gas in the Howard mines of the Queensland Collieries Company? No, I do not think there has ever been any, or we would have discovered it.
3151. And the management generally are prepared to receive recommendations or suggestions from the workmen with the view of effecting improvements? Yes.
3152. The chief manager was always accessible? Yes, he was.
3153. Did he invite the men to see him if there was anything wrong? He would lean that way. I have reported little matters at different times, and I have been told to do the work that was necessary, and that if it was a breakage or anything like that, I need not report, but leave my work and go and repair it.
3154. Had you to leave your work and go and repair it at your own expense? No; if I had I would not do it again.
3155. There is a technical term for payment for that kind of work. In England we call it "consideration money"? Well, I have had "consideration money," but we do not call it "consideration money" here; we call it "shift work" when we do work of that kind, such as clearing the road of falls, taking out timber left on roads—any kind of work outside your own.
3156. Had you any difficulty in getting a reasonable amount of pay for that work? No.
3157. You are always well satisfied? Yes; I remember I cut a place there, and I got no tonnage; the manager knew that it was a difficult job, and he paid me extra for it, though he never promised to do so, and I never asked him for anything extra.
3158. Sometimes, in order to get a place through quickly, do you make it narrower work instead of continuing your board or room the full width? Yes; road width.
3159. Do you get yardage for that in addition to the ordinary tonnage rate? Yes.
3160. Is there any particular figure, or is the amount just left to the manager? It is just left to the manager.
3161. Have you not a rule that so much per yard is paid? No; my experience has been that the underground manager and the men arrange the matter.
3162. In the working of a mine of that kind, if you found a place difficult to work, and it took you some considerable time to get through to the air, could you get a brattice to put the air on? Yes.
3163. You never had any difficulty about that? No.

JOHN FLINT, miner, examined:

J. Flint.
3 May, 1900.

3164. *By the Chairman:* You are a miner? Yes.
3165. Where are you working now? I am working in the Queensland Collieries; just lately I have been sick, and I have not been able to do anything the last few weeks.
3166. How long have you worked in the Queensland Collieries? Ever since they started, about seventeen years ago.
3167. Did you work in any coal mines before that time? Yes.
3168. Where was that? I worked in the Torbanlea Colliery previous to that.
3169. How long were you working there? About six months.
3170. Was that in the old shaft? Yes; that was in the top shaft at the crop.
3171. Have you had any experience of mining in the old country? Yes.
3172. In what part of England? South Yorkshire.
3173. What was the length of your experience there? About fifteen years.
3174. So that you have had over thirty-three years' experience in coal-mining? Yes.
3175. In South Yorkshire were you working in any fiery mines? One or two. In some we generally worked with naked lights; but two mines I worked in were very fiery.
3176. Which were they? One was the Waleswood Colliery, nine miles from Sheffield.
3177. And what was the other one? The West Redford; that is nearer Sheffield again. I forget what company that belonged to, but I know it was a very big company. It was near Darnell, which is only four miles from Sheffield.
3178. And those were very fiery mines? That one was, and another—the Redford No. 1 and the Redford No. 2.

J. Flint. 3179. Was it the custom to use safety lamps in those mines? Always.
3180. What safety lamp did you use? We used the improved "Geordie," as it was known among the miners.
3181. Is that the one with a chimney? Yes, there is one with a smaller glass than that, which we call the "Geordie," but we mostly used the improved "Geordie."
3182. Had it a funnel inside? The improved one had a small one.
3183. Then you have had a good deal of experience in fiery mines? Yes.
3184. In any of those mines in South Yorkshire that you worked in, did you work with naked lights? Only up in the Waleswood Mine, and that was more to the crop of the same bed of coal.
3185. The same bed of coal nearer the crop? Yes. I never saw any gas in the Waleswood Mine.
3186. And the Waleswood was the only colliery that you worked in there with naked lights? Yes.
3187. Was there any mixed system—working with safety lamps in some parts of a mine and with naked lights in other parts—in any of those mines? Not that I am aware of.
3188. Not in working coal? No.
3189. You say you were at Torbanlea for six months? Yes.
3190. Nearly eighteen years ago? Yes.
3191. Did you see any gas in that mine at that time? None at all at that time.
3192. And in the Queensland Collieries have you ever seen gas? I have never seen any.
3193. Not during the whole eighteen years? No.
3194. Is the mine examined every morning before you enter? Yes.
3195. Who does that? The man who is doing it now is called Campbell.
3196. What is his position? He is called underground overman.
3197. How is the mine ventilated? Generally speaking, it is ventilated well.
3198. When you say "generally," what do you mean? I mean that in some parts there cannot be so much air as in others, on account of the bottom heaving and going down in such a tremendous way as it does in that mine. Sometimes the cutting through of a room takes a little longer than is expected. We have to work narrow to bring the work along quickly, and that keeps the air back in that particular part.
3199. If you are working in any place where the ventilation is not good, can you get brattice cloths without any difficulty? Yes.
3200. By asking for them? Yes, by applying to the overman.
3201. Have you ever had any trouble in getting them? No, there is no trouble.
3202. That is if it is necessary? That is if it is really necessary.
3203. Does the management give encouragement to the men to make any report or complaint of anything they see wrong in the mine? Yes; the old hands are open to give any report they think proper, and those reports are generally listened to.
3204. Are the complaints generally attended to? Oh, yes.
3205. Then there is nothing to prevent the miners, if they see anything wrong, reporting it? No.
3206. You have had considerable experience in gas; I should like your opinion as to the use of safety lamps in certain cases. In the case of working away pillars where gas has been seen—I do not say in any great quantity—but in working away pillars where gas has been occasionally seen, would you think it necessary to use safety lamps, or would you work with naked lights? Yes; where gas has been seen time after time, and in a strata that is given to throwing off gas I should think it would be proper to use safety lamps.
3207. Do you think that a good current of ventilation directed on the working faces would do away with the necessity for the use of safety lamps? Well, in the matter of taking out stoops, I daresay it might do, but if it was in the solid coal I do not think so. What I mean to say is, that there is more danger when you have the loose ground at the back than there might be in the solid.
3208. That is in working out the pillars? Yes, I think so.
3209. Have you known of any collieries in the old country where gas is known to exist, and where the pillars have been worked out with naked lights? Not in the old country. I never worked where they were taking any out. The mines I worked in were generally new.
3210. What system were they working there? They worked stoop and room in Wales, something after the style of our system. They took two rooms up together because the roof and floor were better, and then left a pillar in.
3211. Then, you think, as a matter of practice, it would be better to use safety lamps? If you are working in a strata that throws off gas in great quantities.
3212. I am not speaking of throwing off gas in great quantities. No doubt they would be used in such cases; but when it is thrown off in moderate quantities, would you think it necessary then to use safety lamps? Yes, I think it would be necessary. In cases where the managers see the places, as they generally do, if there was gas in one part of the mine and not in another, I do not say it would be advisable to work all over the mine with safety lamps—only in particular parts.
3213. Do you think it would be a good thing to make it compulsory to use safety lamps in such cases, or would you prefer leaving it to the judgment of the manager or overman? That is a very hard question to answer.
3214. You might say a great deal depended upon the managers; but supposing the managers were good? I do not know about making it compulsory. I would leave it to the manager, with the men, to give any reports they might think fit.
3215. Would you leave it to the judgment of the manager and men as to whether safety lamps should be used rather than make it compulsory by law? I think so.
3216. In those collieries in South Yorkshire that were fiery, in getting the coal were shots ever used? Yes.
3217. Even though safety lamps were used? Yes.
3218. Under what system were the shots fired? The miners never fired the shots.
3219. Whose duty was it to fire them? The deputy—commonly called the "doggy." It was the overman who was called the "doggy." They got the name in this way: In olden times they were the overmen over the boys, and they were often to be heard saying "dog that horse alone," or "dog that wagon alone"; so they got the name of "doggy."

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3220. It was his duty to examine the places and fire the shots? Yes, the miners prepared the shots, and then one of them would say, "Let 'Doggy' know that this shot wants firing." He would then come along, but you would have to wait your turn for firing shots.
3221. Where were you when the shot was fired? In the return.
3222. *By Mr. Glassey:* Were safety lamps used in the places you are now speaking of? Yes.
3223. *By the Chairman:* Did you ever know of any accident from firing of shots there? Never.
3224. What explosive was used? Compressed powder they were using there, but there was loose powder for stone work.
3225. Were the shots in the form of cartridges? In the form of bobbins.
3226. Did they ever use water cartridges there? Never.
3227. And you never knew of any accident with those precautions taken? Never.
3228. Do you, as an old miner, think it is a safe thing to allow firing of shots where you think safety lamps are necessary? Yes, where the air is carried forward I think it is quite safe.
3229. It is quite safe where there is good ventilation, and where ordinary precautions are used? Yes.
3230. *By Mr. Fryar:* Where you were working at Torbanlea—was that a shaft or a tunnel? A little shaft at the top of the hill.
3231. Was there any tunnel there when you were working there? I do not mind any. There was a little air-shaft we used to walk down. It was 100 yards straight from the shaft in a westerly direction. We used to go down the ladder. The crop was near there.
3232. *By Mr. Glassey:* I understood you to say, in answer to the Chairman, that you have had about thirty-three years' experience in coal-mines? Yes.
3233. Seventeen years of which have been out here? Yes.
3234. And the whole of the balance of your mining life was spent in mines in Yorkshire? Yes.
3235. That is fifteen years? Yes.
3236. And during that time you spent about three or four years in mines which gave off a good deal of gas? Yes.
3237. You have said, in answer to the Chairman, that when working whole coal in places where gas has been given off, you consider it desirable to use safety lamps in removing the pillars? Yes, where there is gas.
3238. And the reason you gave was that the rooms can be seen and ventilated? Yes.
3239. The same thing does not apply to the working of pillars—they cannot be so well seen at all times in consequence of falls, and cannot be so well ventilated? Well, there is a back ground that you cannot always get at.
3240. Back ground called waste or excavations? Yes.
3241. That back ground, or waste, or excavations, cannot be so well ventilated as the rooms? You generally brattice to carry the air with you on the front of the face; you do not want to take the air round to the waste all the time.
3242. Is it your experience that quantities of gas gather and accumulate in those excavations? It is quite possible that it might, if they were giving off gas.
3243. If the gas was being given off in a particular district, is there a likelihood of an accumulation of gas being found in the waste? Yes.
3244. Therefore, you suggest that under those circumstances safety lamps should be used by the men when removing pillars? Yes.
3245. I think you said, in answer to the Chairman, that it would be better to leave it to the judgment of the men to make a report to the manager when safety lamps should be used? No, to the judgment of the manager and the men themselves.
3246. As a practical miner do you think it is a wise thing to leave matters so loose as that—to the whims, if I may use the term— of the men and the manager as to when safety lamps should be used; do you think that is a wise provision? I cannot answer that question freely. I think the men would look after their own safety.
3247. In your experience have you not found that in all bodies of men there are a considerable number who are much more careless and reckless than others? Well, you will always find that in everything, but I think the wiser part of them would be able to look after the men in such things. I have seen that in many a case—the older hands have seen to a matter directly. As a rule miners talk with one another, and you generally know what is going on, so that with regard to that question I would just stick to what I have already said.
3248. Then, you think it would not be wise to enforce by law a provision that safety lamps should be used under the conditions you have mentioned? I keep to the same answer.
3249. That is to say, you would leave it to the men and the manager to regulate the matter among themselves? Yes.
3250. You say that sometimes the air is much more slack in some places in the mine than in others, and that it is difficult to get ventilation in? Yes.
3251. Is there any difficulty in ventilating those places you have spoken of, and if so what is the difficulty? The experience we have here, as we had in the old mine, is that we have not a good roof.
3252. The roof was exceedingly brittle, and the floor exceedingly fosy? Yes, if you cut a piece through there at night, and the manager went there next morning he would swear that you had never been through. Many a time we have shifted a quantity of muck there to make an opening, and in the morning the manager found it closed and said we had not cut it through.
3253. You have got away from that condition of affairs now? Yes; still we have the same difficulty to contend with, but the seam is not quite so small.
3254. Speaking generally, do you think it would be a wise thing to provide by law that the means of ventilation must be kept within so many yards of the working places where the men are engaged? Yes. That has been done, but I cannot see why in some cases a brattice would not be good enough for the short time it would be required; in others you would want an iron tunnel, I think.
3255. Speaking generally, would it be a wise provision to stipulate the number of yards that a brattice must be from the face in order to convey fresh air to the men employed there? Yes.
3256. I suppose you know that that is the law in some parts of the world? Yes.

J. Flint. 3 May, 1900.

3257. Do you think it should be provided by law rather than left to the men themselves and the manager—I am speaking generally, for, of course, there are extreme cases where it would be difficult to do that? There would be a brattice in some places, but, of course, if everybody wanted brattices you would want hundreds or thousands of yards of brattice. My experience is that a brattice is only of short duration in ventilation, for it breaks down, and it seems to get out of its proper form; it is almost as bad as a woman's petticoat when she is running.
3258. I suppose you believe that the places where men work ought to be ventilated? Yes; I believe greatly in ventilation, but not to force compulsory brattices on them in all cases. In some cases a brattice has to be used, but where the air is carried up to a room by a conduit that is not necessary.
3259. What distance do you think the means of ventilation should be from the working places, whether you carry up the gob, or whether you carry up the canvas, or anything else? That depends a good deal on the roof; it mostly depends on the earth you have to work—that is, your floor and roof. Of course, in stooping a room you could have 20 yards, sometimes less, and sometimes a little more—15 and 10 yards we have it, so as to get the air through quicker.
3260. In stoops and rooms what distance would you keep the brattice? I think 10 or 15 yards is far enough back.
3261. Then you think that fresh air should be conveyed by some means within 10 or 15 yards of the working places where the men are employed? Yes.
3262. Coming now to the mine you are now in, you say the place is examined every morning? Yes.
3263. Are the places examined with a safety lamp? I do not know what the man uses, but I know that there has been no gas.
3264. Do you suppose it is a wise thing to examine a mine with a naked light, even supposing gas has not been seen there? Not at all.
3265. You think that under all circumstances, whether gas has been discovered or not, a mine should be examined by a competent person with a safety lamp? Yes, without a safety lamp if gas has not been discovered; he would be a very poor man who could not discover gas where gas has never been seen, and the strata does not throw off gas.
3266. It is on record that gas has been discovered in a mine after a hundred years? Was the mine worked day by day?
3267. Yes; that is on record. Now I ask you whether, with a view of preventing injury to miners or destruction of life, it is not a wise precaution to examine all places with a safety lamp before the men enter? I cannot see that it would be necessary if gas had not been discovered, unless a mine was creeping, or there was a big place that you thought might break some day or other. If a mine was creeping, and there was a big fall expected, then it might be necessary.
3268. Do you know that it is the law at present that every mine has to be examined each shift by a competent person with a safety lamp? Yes; I know that has been the law for years.
3269. Not for years? In the old country it has.
3270. *Mr. Fryar:* It is not provided in our law that the examination shall be made with a safety lamp.
3271. *By Mr. Glassey:* Then, generally speaking, the Queensland Collieries are well managed and fairly well ventilated? Well, yes.
3272. And you have never known of any complaints from the men in reference to any deficiency of any importance? Not of any importance.
3273. And when the men made complaints to the manager, those complaints were attended to? Yes, if you went the right way about it.
3274. *By Mr. Fryar:* Were you far from Barnsley when you were in Yorkshire? Fourteen miles.
3275. There are a large number of collieries around Barnsley? A great many.
3276. And they are all, as far as you know, charged heavily with gas? All of them in that district.
3277. Were you near Barnsley when that explosion took place at the Oaks? No; I was present when the Swaithemain explosion took place.
3278. You did not work in any of those very gassy mines? No. The explosion happened after I went down there to see some mates. It was a big explosion.

HENRY PRITCHARD, miner, examined:

H. Pritchard. 3 May, 1900.

3279. *By the Chairman:* You are a practical miner? Yes.
3280. Where are you working now? In the Burrum Colliery.
3281. The River Bank Colliery? Yes.
3282. How long have you been working in that colliery? I have been off and on there these last four years.
3283. Have you worked in any other colliery in this district? Yes, I have worked in the Queensland.
3284. Did you ever work in the Torbanlea? Yes, I worked there a little about eight years ago.
3285. Were you working there for any length of time? No, about two months
3286. What part of the mine? In the Burrum seam, as they call it.
3287. How long have you been in this district altogether? About seven years or a little better.
3288. Where were you before that? Newcastle, New South Wales.
3289. How long were you in that district? About three years.
3290. And before that? In the old country.
3291. What part? A place called Monmouthshire.
3292. What length of time were you working there? Twenty years.
3293. Then you have had about thirty-one years' experience altogether in coal-mining? Yes.
3294. In Monmouthshire did you work in any fiery mines? Yes, I have worked in them from childhood.
3295. Was there plenty of gas there? Yes.
3296. Was it compulsory to use safety lamps there? No, not in the part where I was.
3297. What part where you working in? In a place called Blayney.
3298. You worked there with naked lights? Yes, in my days.
3299. Was there much gas there? Oh, yes.
3300. You trusted then to good ventilation? Yes.

3301. Do you know about what current of air was passing through—how much per minute? No; I could not say. I know there was a good current passing.
3302. Were there any accidents from explosion while you were working there? Oh, yes. I did not happen to be in at the time, but I was in the same pit.
3303. Were naked lights used all over that pit? Yes, all over Playney in my days.
3304. Do you think that is a safe system of working? It is hard to say. If you could keep plenty of ventilation going you could keep the gas down. That is what they depended upon.
3305. In Monmouthshire did you ever have any of those sudden outbursts of gas? Blowers?
3306. Yes? Oh, yes.
3307. Could ventilation cope with them? Of course blowers break out with terrible power.
3308. Do you think if there was a big blower the ventilation would be able to carry off the gas in safety? Well, yes, I think so on this condition—that they worked with locked lamps.
3309. But you are talking about working with naked lights? There were not many blowers where I came from, but I know places where there are blowers.
3310. In any of the mines in Monmouthshire, in your time, did they use safety lamps? Yes.
3311. Were they used in the mines where these blowers occurred? Yes; in places called Abercarn and Gleman they used safety lamps. There were dangerous blowers in those places, and that was the cause of the locked lamps being used.
3312. Wherever there were blowers locked lamps had to be used? Yes; I think so.
3313. But I understood you to say that where gas came off regularly from the coal you thought sufficient ventilation should carry it away? Yes, it could be managed, no doubt, with plenty of ventilation and good care.
3314. But do you not think that where there is so much gas it would be better to use safety lamps? Well, that is best known to the manager. If he is not capable of keeping the gas down, then, of course, the best thing to do is to use safety lamps, to my idea.
3315. Would you make locked lamps compulsory where gas in that amount occurred? Well, no, I do not think I would; unless there were blowers or things like it.
3316. Would you prefer to leave it to the judgment of the manager? Well, yes; I think it is his place.
3317. Since you have been working in the Burrum Colliery, have you seen any gas? No.
3318. None at all? No; but I have heard talk of some.
3319. What did you hear? I heard them saying there was gas there.
3320. Do you know in which part of the mine? Yes; on the north side.
3321. Are they working there now? No; not in that part of the mine.
3322. Is that part of the mine closed? It is not working.
3323. And you do not know of your own knowledge whether there was much gas or little—you have only heard it spoken of? Not a great lot.
3324. You have only heard of it—you did not see it yourself? No.
3325. Were you ever working in that part of the mine yourself? Yes.
3326. For how long? There was never any found when I was there.
3327. But how long were you in that part of the mine? Not much time—we shifted about.
3328. How long is it since you worked in that portion of the mine? Eighteen months ago.
3329. And while you were working there you saw no gas? No.
3330 But you had heard that gas does occur there? Yes.
3331. Did you ever hear of the gas being lighted or fired? Yes, I heard talk of it being fired when Mr. Rankin was there.
3332. *By Mr. Glassey:* How long ago was that? It is not long ago.
3333. *By the Chairman:* But in the portion of the mine that is being worked now you have never heard of gas being found? No, I have not.
3334. Is that mine examined every morning before the men enter? That is more than I can say. There is a man there, but whether he goes to examine the mine I do not know; I see no mark.
3335. You cannot say whether it is examined or not before the men enter in the morning? No, I cannot.
3336. Is the ventilation good? The ventilation is not bad, not so bad as it has been.
3337. How long is it since the ventilation has improved? Since the erection of the fan.
3338. *By Mr. Glassey:* Not since the Commission came into the district? Yes, I think so.
3339. Then you think that things have been hurried up a bit since the Royal Commission came into the district? I do not know about that.
3340 Do you think the appointment of the Commission had anything to do with improving the ventilation of that mine? It is hard to say that.
3341. Do you think the presence of the Commission has hurried things up a bit? That is rather a queer question for me to answer; I cannot tell what is in other people's minds.
3342. At any rate the ventilation has improved considerably during the last week or so? Oh, yes.
3343. *By the Chairman:* Have you ever had to make any complaint as to the working of the mine from the point of view of safety or ventilation? Oh, yes; we complained a little sometimes, we wanted more ventilation.
3344. And did the management attend to your complaints, or attempt to do so? Well, they tried to make some improvements sometimes.
3345. What I mean is, if you make a complaint is it generally entertained, and do the management try to effect the improvements you ask for if they find that the complaint is a reasonable one? Yes, I think so; if they think they can make improvements they try to do so.
3346. *By Mr. Fryar:* They have recently erected a fan there? Yes.
3347. Had they any means previously of ventilating the mine? Yes, in a sort of a way. They had a kind of lamp on the bottom of the air shaft.
3348. *By Mr. Glassey:* Do you mean a grated lamp with fire in it? I was never up there, but I believe it was something of that sort,
3349. Did they describe that as a furnace? No, it was not a furnace.
3350. Was it a substitute for a furnace? Yes; if you put fire in it it acts as a furnace.
3351. What size was it?—Would a man be able to carry it in his hand like a bucket? Yes.

H. Pritchard. 3352. That is what they used in place of a furnace to ventilate the mine? I could not tell you what the size of it was, because I have not seen it.

3 May, 1900. 3353. Before the erection of the fan was the general ventilation bad? Yes.

3354. Did you yourself make complaints about it? No, I did not make any complaint, because I did not have much need to where I was. I was only in one place, and that was on the main level, and the air level was alongside of me.

3355. As far as you remember, how many men were working in the mine before the fan was erected? Thirty or forty.

3356. How long is it since that level where gas was discovered was stopped? I think it has not been worked but very little since Mr. Sharp came there.

3357. How long ago is that—about eleven months? Yes.

3358. During the time Mr. Sharp was manager was the ventilation bad? Yes.

3359. And until the fan was erected the only means of ventilation was that fire thing hanging in the shaft? It was in the bottom of the air shaft, and I suppose it was there to improve the air.

3360. How long have you been working in the Burrum Mine? About four years, off and on.

3361. Has the ventilation, generally speaking, been bad or good during the time you have worked there? I cannot say that at the Burrum it is extra bad; I have seen it worse many times.

3362. Seen it worse where? Oh, in places.

3363. What places? I have seen it worse in places in the pit.

3364. It has been good in some places and bad in other places? Yes.

3365. Generally speaking, has the ventilation been bad or good? Well, I could not say it was good.

3366. It is much improved now, since the erection of the fan? Yes.

3367. Do you think there ought to be a provision in the Act of Parliament to the effect that the ventilation must be conveyed to within a certain distance of a working place, so that pure air should be conveyed to the miners? In my opinion, yes; of course I try to get as much ventilation as I can.

3368. Do you think there should be a provision in the Act of Parliament that ventilation should be conveyed by some means to within so many yards of where the men are working in a place? Yes, I think that would be a very good thing.

3369. How many yards would you stipulate? For the air to be conveyed from the face?

3370. Yes? Twenty-five yards at the furthest.

PATRICK MCKENNA, underground manager, examined:

P. McKenna. 3371. *By the Chairman:* Are you the underground manager in the Queensland Company's Collieries? Yes.

3 May, 1900. 3372. You have charge of the whole management underground? Yes.

3373. How long have you held that position? Altogether, off and on, about fourteen years.

3374. What experience in coal-mining had you previous to that? I worked in coal-mines in Scotland.

3375. For how long? Fourteen years.

3376. In what mines were you working there? The principal part of the time I was in Lanarkshire, in a mine called the Rosshall.

3377. Were you working in any other mine but that? Yes; in several mines.

3378. But that was the principal one? Yes.

3379. Were you troubled much with gas? Yes; there was a great deal of gas in Rosshall.

3380. In what part of the mine did you principally get gas? In working the solid coal generally.

3381. You got more gas there than in working out broken ground? I never worked in broken ground except once, for about six months in that same mine.

3382. In working solid coal were safety lamps used? Not for more than a day or two at a time.

3383. Was that when gas had been met with? When it was reported in the morning that there was gas and it was considered unsafe to go in with the naked lights.

3384. How was that gas got rid of? By bratticing.

3385. Then did it accumulate there because the brattice had not been brought far enough up to the face? We worked there on the long wall principle. It would accumulate in front of the brushing.

3386. Was gas given off very regularly from this particular coal? Yes; pretty regularly.

3387. And was carried away under ordinary circumstances by ventilation? By ventilation.

3388. Swept along the working faces? Yes.

3389. In your opinion, even though gas was continuously being given off, do you think it was safe to work with naked lights? Yes; I think it was quite safe.

3390. With the precautions that were taken? Yes.

3391. On the occasions when you used safety lamps, who would instruct the men to use them? The fireman.

3392. Did the fireman examine the places every morning? Every morning.

3393. With a safety lamp? With a safety lamp.

3394. And he would report to the men if their places were unsafe? Yes.

3395. That is if he found gas? If he found gas.

3396. And on those occasions he compelled the use of safety lamps? Yes.

3397. I suppose the safety lamps were locked? All locked.

3398. You said you were at pillar work for a short time? Yes, in that same mine for about six months.

3399. What was the system there in reference to lights? Naked lights.

3400. Were safety lamps occasionally used there? I never saw a safety lamp used there.

3401. Not in broken ground? No.

3402. You got more gas from the solid coal than in working in the broken? I never saw it in the broken ground.

3403. Was there any accident from explosion while you were there? Not while I was there.

3404. And you were there nearly fourteen years? I must have been over ten years in the one colliery.

3405. *By Mr. Glassey:* There was more than one colliery in connection with the work? Yes; they had thirteen mines belonging to the one work.

3406. *By the Chairman:* Have you worked in any other mines in this district? I worked a little while for Mr. Walsh in the old shaft next the river.
3407. What was the depth of that? As near as I can guess it was between 60 and 70 feet. I do not think it was more than that.
3408. Were your workings there at all extensive? No; not very extensive.
3409. And it was close to the outcrop? Yes; we worked right out to the outcrop and we worked right out to the old tunnel that had been driven from the river.
3410. Did you ever meet with any gas there? No.
3411. You would hardly be likely to if it was near the surface, even if it was a gassy mine? No; we would hardly be likely to.
3412. Now, coming to the Queensland Collieries, are the workings examined every morning before the men enter? Yes; I may say I had a little experience in the Beaufort. I worked there for two or three years.
3413. Did you ever see any gas there? No.
3414. Were they shallow workings, too? Yes; none of them were very deep.
3415. Were they extensive? No; not very extensive.
3416. Whose duty is it to examine the workings in the morning at the Queensland Collieries? The overman's.
3417. His name is Campbell? Yes; it is the overman's duty.
3418. Does he use a safety lamp? No.
3419. He examines with a naked light? A naked light.
3420. Have the workings always been examined since you have been manager of the mine? Yes.
3421. Every morning? Every morning. We keep another man called a roadsman, and he examined the workings previous to this man being appointed.
3422. At what time would the roadsman examine the workings? The first thing in the morning. They all go down together in the first cage.
3423. Then the only change is that the overman does it now instead of the roadsman? Yes.
3424. But it has always been examined since you have been manager before the men entered? Yes.
3425. And a report made? Yes, made in the book.
3426. Who allows the men down? The head man allows them down from the top of the pit.
3427. On receiving the report? I go down in the first cage every morning, and if I don't go down I appoint someone else.
3428. Then, on receiving the report, you direct the men to go to their working places? Mr. Campbell reports to me if there is anything serious the matter, and of course I prevent the men from going to dangerous places, and find something else for them to do if it is convenient for me.
3429. Now, how often do you examine the mine yourself personally? Once in every week—sometimes twice.
3430. And do you enter the result of that weekly examination in a book? Yes.
3431. In that report do you mention anything special that you may see? Yes.
3432. In your examinations have you ever met with any gas in the mine? I have never met with any gas.
3433. None at all? None.
3434. Has the overman or roadsman ever met with any? They have never reported any gas.
3435. And you have never heard of it from any of the workmen? I have never heard of it.
3436. Not in any part of the mine? Not in any part of the mine.
3437. The mine is divided up, I believe, into different sections? Yes.
3438. And they are ventilated from different sources and by different means? Yes.
3439. What different means of ventilation have you in the mine at the present time? One part of the mine is ventilated by means of a fan on top; the other part—the dip workings—are ventilated by a steam jet.
3440. And a furnace is being built, is it not, to ventilate another section? Yes.
3441. Which, in your opinion, is the best method of ventilation? The fan, no doubt, is the best method, though steam is very good.
3442. You prefer the fan to the other means? Yes.
3443. Why? It seems to be much steadier and much safer.
3444. What current of air do you consider is passing through the workings? The last time I took it, it registered about 370 revolutions by the anemometer.
3445. *By Mr. Rankin:* I think you told me you got about 16,000 feet in the level road, and about 12,000 in the dip? About that.
3446. *By the Chairman:* Do you consider the mine well ventilated? Yes, I consider it very well ventilated.
3447. Have you had many complaints from the men, or reports of things being wrong in the mine Nothing of any consequence.
3448. Do you encourage the men to inform you if there is anything wrong? I always give them all the encouragement I can.
3449. You wish them to report if they see anything wrong? If they do not I rebuke them for it.
3450. So there would be no excuse for them not doing so? No excuse.
3451. *By Mr. Fryar:* If they say it is very hot, you do not tell them to go where it is hotter? No, I do not use such expressions.
3452. *By Mr. Glassey:* You have been manager of the Queensland Collieries for the last fourteen years, off and on? Yes.
3453. How long were you away during the times there was a break in your service? Only a few months.
3454. You have been underground manager of those mines pretty well continuously for the last fourteen years? Yes.
3455. How long were you employed in Rosshall? I must have been ten years in Rosshall.
3456. In what mines? Principally Nos. 10, 13, 7, and 12.

P. McKenna. 3457. In the mines you have mentioned did you work various seams of coal, or did you find only one seam of coal in them all? Various seams.

3 May, 1900. 3458. Were any of those seams gassy—giving off quantities of gas? Nearly every one of them gave off gas more or less.

3459. And every one of those mines was examined every morning by a person with a safety lamp before the men entered? Yes.

3460. There was some particular place where the men stopped until the safety of the mine was reported? The system in every pit I was in was that the fireman examined each place, and then went to the top and reported the condition of the mine.

3461. Did he examine the places with a safety lamp? Yes.

3462. And he left a mark in the mine to indicate safety? The day of the month.

3463. Did he put his initials as well? No.

3464. Supposing he found any place unsafe, would he report that at the top, or put some mark underground? He would generally put something across the road.

3465. And that would indicate that there was something wrong? Yes.

3466. While there, did you yourself see much gas in those mines? Not a great deal.

3467. So that your knowledge is limited to some extent? It is limited.

3468. But you have had some knowledge of it? Yes, my father was burnt there severely, and I was working with him at the time.

3469. Did that take place in the old shaft? Yes.

3470. And had the place been examined in the morning? Yes; the accident was as much his fault as anybody else's. We were working long wall. The overman came in and went round the nose of the coal into the cundy. There happened to be a little bit of a fall, and my father went up on top of that with his lamp on his head and lit the gas.

3471. Do you think that the gas which you found at the edge of the coal near the cundy was not likely to have come from the old workings? I do not think so.

3472. There would be no accumulation of gas in the old workings? I do not think so.

3473. Were the old workings ventilated? Yes; the air was passing round there.

3474. Would there be any portion of the old workings that the air would not pass round? Not that I am aware of.

3475. Now, coming to the Queensland Collieries Company's mines, I understood you to say that those mines under your management are examined every morning before the men commence work? Yes.

3476. Are the mines examined by one man, or by more than one man? By one man only.

3477. Do you not think that the mine you are now working is rather extensive for one man to examine it every morning with a safety lamp? With a safety lamp, it would be.

3478. You say the men do not leave the top until it is reported that the mine is safe? No, do not leave the bottom.

3479. Then, the bottom is your station? Yes.

3480. I think you said your system of ventilation is by means of a fan? Yes.

3481. Do you split your air and convey it in suitable quantities to the men situated in different parts of the mine? Yes.

3482. Have you regulating doors? Yes.

3483. Is there any district in your mine where seventy men are employed in one section? No.

3484. I suppose you know that seventy is the limit? Yes.

3485. Do you keep plans of the mine? I do not keep them personally, but there are plans kept.

3486. Who keeps the plans? Mr. Rankin.

3487. Do you see those plans? Yes, very often.

3488. Who brings the workings forward on the plan? Mr. Rankin, generally.

3489. He does that according to your reports? No; he surveys the mine himself.

3490. Has the person who examines the mine in the morning before the men commence work a book in which to make his reports? Yes.

3491. When does he enter up his reports? Every morning.

3492. As soon as his examination is over? Yes.

3493. And you make a weekly report? Yes.

3494. You have not that book with you? No.

3495. When the inspector visits your mine, does he make extracts from those books of yours? I do not know anything about that.

3496. At any rate you make a weekly report as to the general condition of the mine? Yes.

3497. Of the internal workings, the main shaft, the ropes, chains, and so forth? Yes; of those underground.

3498. During the time you have been underground manager, have the men availed themselves of the provision in the Act which enables them to make a monthly examination of the mine? No.

3499. There has been no obstacle, so far as you know, thrown in the way of the men doing that if they so desire? No.

3500. Would you prefer that that was done? I would, really.

3501. You have never invited the men to do it? No.

SYDNEY RICHARD SMYTH, medical practitioner, examined:

S. R. Smyth. 3502. *By the Chairman:* You are a duly qualified medical practitioner? Yes.

3503. Practising in Howard? Yes.

3 May, 1900. 3504. Do you remember the 21st of March last, the day of the accident at Torbanlea? Yes.

3505. Were you called there? I received a telegram from, I think, the pitman or topman, and I proceeded immediately down to Torbanlea.

3506. Did you go by train? Yes; the train happened to be going at the time, and I went down by train.

3507. At what time did you reach Torbanlea on that day? About five minutes to 3 o'clock. I got the telegram about 2 o'clock, and the quickest way to go was by the ten minutes to 3 train.

S. R. Smyth. 3 May, 1900.

3508. When you arrived there had any other medical man arrived? I think Dr. Robertson arrived just about the same time; a special train was just coming in.
3509. He came from Maryborough? Yes.
3510. Were any of the injured men at the station at the time? Yes; they had brought them down.
3511. How many of them were there when you arrived? There were four in the station.
3512. The man Griggs was not there? No, they were bringing the man Griggs down in a cart through the bush.
3513. Will you just inform us what state the men were in when you saw them? Individually?
3514. Yes, individually? Griggs was apparently the worst.
3515. We will take the others first, as Griggs was not there at the time? Some of the men were apparently not very bad. Old Houston seemed to have more strength than the others, but young Houston and the other man, Johnstone, seemed very bad. They were wrapped up, lying on the floor, and, as they were going in the train to Maryborough immediately, I did not disturb them or overhaul them. I could do no good by doing so, and I just relieved them as far as I could, giving them drink, and making them comfortable and getting them into the train.
3516. What were they wrapped in? They were wrapped in blankets, and I think someone had put oil and dressing on them. I know that Gambie was dressed. His hands were dressed when he arrived.
3517. Were any of them in a state of collapse? No; they were not insensible any of them.
3518. And Griggs, who was the worst, how long after was he brought to the station? I suppose about five minutes afterwards. The train went part of the way to the pit head and met him a few hundred yards up and brought him back again. He certainly seemed the worst of the whole lot. Next to him Johnstone, and then young Houston.
3519. And when you saw them what was your opinion? I thought that Gambie and Sandy Houston would get over it, but it depended upon the extent of the burns, and I had no opportunity of seeing how far they were burnt.
3520. You judged simply by their strength at the time? Yes; I thought they would pull through.
3521. And on the other three you could not give an opinion? No; they seemed to be very bad indeed.
3522. Now, from the way in which they were wrapped up and treated, do you think that everything was done that could reasonably be expected? At the time I saw them I certainly think that no more could have been done for them.
3523. Of course you do not know how long it was from the time of the accident until they were wrapped up in blankets? No; but when I saw them they were wrapped up and made as comfortable as they could be under the circumstances. The elder Houston and Gambie were able to walk into the train. Houston's legs did not seem to be so much burnt, but his body was. Gambie sat up in the train and did not want to lie down. I made him lie down and put pillows under him. He seemed to be particularly strong.
3524. You think from what you saw that everything had been done that one would have expected? Certainly. I do not think anything more could possibly have been done for them up to the time I saw them.
3525. You do not know of your own knowledge whether any dressings are kept at the mine in case of accident? No, I never saw any. I do not think such a thing is kept.
3526. Were you at the pit yourself? No, they were at the railway station when I arrived. At Mr. Rankin's mine, I may say, they do keep appliances. They have a large case with appliances in it.
3527. But you do not know whether there are any at Torbanlea? I never saw any.
3528. Had you been to Torbanlea before? Yes, constantly. I am their doctor.
3529. As far as you know there was nothing of the sort kept there? I never saw anything.
3530. *By Mr. Glassey:* You are colliery doctor for Torbanlea? I am not engaged by the management at all. I attend some of the miners. Some of them pay me so much a week.
3531. The men themselves met and appointed a doctor? There is a lodge, and some of the miners pay so much a month towards my expenses. Some I have nothing to do with.
3532. It is only through the lodge that you attend the miners? And through private practice.
3533. You have no official connection with the pit itself? No, none whatever.
3534. *By Mr. Rankin:* I understood that you occupied the same position as you do at Howard? No, I do not know anything about Mr. Robertson. I never spoke to him in my life.
3535. *By Mr. Glassey:* You never heard of any appliances being kept at the mine for use when accidents occur? No; I do not think there are any.
3536. Did you hear of any complaints being made in reference to delay in getting the men out of the pit or of want of appliances when they were got out? No; I heard no complaints.

ELIAS GAMBIE, labourer, examined:

E. Gambie. 3 May, 1900.

3537. *By the Chairman:* You are the father of Mr. Gambie who was killed in the Torbanlea disaster? Yes.
3538. What is your occupation? Labourer, working at the pit top.
3539. When did you first see your son after the accident? I saw him on the Thursday.
3540. The accident occurred on the Wednesday? Yes.
3541. At which mine are you working? At the Queensland Colliery.
3542. Was your son in the hospital at that time? Yes.
3543. And did you see him frequently in the hospital up to the time of his death? Yes; I saw him several times.
3544. Did he at any time make any remark to you with reference to the mine? The only thing I heard him say was, "If I get over this I will make somebody suffer for it."
3545. That is the only thing you heard him say? Yes.
3546. He did not say how he thought the accident occurred? No; he did not say. I did not hear him say.
3547. He did not say where he thought the gas which caused the explosion came from? No; not at that time, but he did the time before.

E. Gambie. 3548. What do you mean by "the time before"? On the Sunday before it happened.
3549. He could not say before the explosion where the gas came from that caused the explosion? No.
3 May, 1900. 3550. That is the only thing you heard him say in the hospital? Yes.
3551. What did you take him to mean when he said that if he got over it he would make somebody suffer? I suppose he meant he would go to law.
3552. Now, you said he made some remark to you on the Sunday previous? On the Sunday before the accident.
3553. What did he say then? He said there were something uncommon in the place, and that he said to the underground manager, "There is something wrong here." The underground manager said, "It is all right," and he said he was not satisfied with that, but that he would go and see for himself. In going down he met Mr. Sharp, who said, "What is the matter now, Mos"? and he said, "There is something wrong here, and I am going to see for myself." Mr. Sharp said, "You are quite right," and they both went together into the dip. Mr. Sharp said, "It is all right," and he then went back to his work. He said he did not feel satisfied over it all the same, but still he worked the remainder of the day.
3554. That is the statement he made to you? Yes.
3555. Do you know Torbanlea Colliery yourself? No, I never was at the pit.
3556. That is, as nearly as you can remember, what he stated to you on the Sunday before? Yes.
3557. Has he often complained to you? Well, he told me about three months before that that he went in to try the mine before the others came in. At the time he had gone in one of his mates who worked with him opened the door of the room, and the gas caught fire. He had the presence of mind to fall down, but the gas burnt the hair on the back of his head, and he showed me where it was burnt.
3558. Do you know if he made any complaint with regard to that occurrence, or reported it to the overman? I do not know whether he complained to Mr. Sharp or not, but I suppose he did.
3559. It is no use supposing—you don't know? No, I could not say.
3560. That was about three months before? Yes.
3561. Was that the first complaint you heard him make? Yes.
3562. Those are the only three times, then, that you heard him speak of the occurrence of gas in the mine? Yes.
3563. How many times did you see him in the hospital before his death? I was up there sometimes three times a day.
3564. Was he sensible all that time? No.
3565. For what time was he sensible? He was not sensible the last week at all; he would only come to for a few minutes, and would then be gone again.
3566. How long was he in the hospital before his death? About a fortnight. He went in on the 21st of March, and he died on the 1st of April.
3567. *By Mr. Glassey:* How long had he been in the hospital when he made the statement that if he got over this he would make someone suffer? About two or three days.
3568. Where did he make that statement you have said he made on the Sunday previous to the occurrence? In my own house.
3569. Did anyone hear him make that statement besides yourself? There was nobody there but myself.
3570. What did you infer from his statement that if he was spared to get better he would make someone suffer? That he meant to make somebody pay for it.
3571. Did you infer from it that the mine had previously been unsafe, and that in consequence of that unsafety the accident was preventable? Yes.
3572. Did you infer that from the statement he had made to you three months before that Sunday? Yes.
3573. That is to say, some three months ago he complained that the mine was in an unsafe condition? Yes.
3574. From gas? From gas.
3575. *By the Chairman:* You did not use the word "unsafe" when answering my questions. What you said to me was that he told you a certain thing about going down with the manager? Yes.
3576. *By Mr. Glassey:* On the Sunday before the accident did he make a statement to you to the effect that the mine was unsafe on account of gas? Yes, he did.
3577. And you say that three months before that he complained of the unsafety of the mine? Yes.
3578. Did that enable you to draw the inference you have mentioned that you did draw from the statement he made in the hospital that if he got better he would make someone suffer? Yes, it did, because I thought then from what he had stated that the explosion had been expected for that length of time.
3579. At anyrate, on some occasions he made the statement that the mine, in his judgment, was unsafe on account of gas? Yes.
3580. And that he complained to the fireman, and the fireman told him it was all right? Yes.
3581. And he said that he was not satisfied, and that he would go and examine the place for himself? Yes.
3582. Did he examine the place for himself? Mr. Sharp and he went down together, and Mr. Sharp told him it was all right, and he went back to work.
3583. *By the Chairman:* If it was not all right would he not have had an equal chance with Mr. Sharp of seeing that? Yes.
3584. And he went back to work? Yes.
3585. When was it that he told you that he had complained to the fireman, and that he met the manager afterwards and they went in together? On the Sunday before he died.
3586. He told you that he did go with the manager to examine his place? Yes.
3587. And he examined it with the manager? Yes.
3588. And as a result of that he returned to work in the same place? Yes.
3589. Wouldn't you infer from that that he found the place safe? I suppose by that that it would be safe.
3590. Would he have returned to work after having made the complaint if the place had been unsafe? That I could not say.

E. Gambie. 3 May, 1900.

3591. You have been inferring what you think he meant when he said certain things. Cannot you infer something from his action in that instance; what would you infer from his action in going back to his working place—would you infer from that action that the mine was unsafe? I should say it would not be safe if there was gas.
3592. He examined the mine with the manager; the manager said it was all right; he had an opportunity of seeing if that was the case; and he then went back to his working place. What would you infer from that?—Do you think he would go back to his work if the mine was unsafe? I should think not.
3593. *By Mr. Glassey:* Three months ago your son complained—of what? Of gas.
3594. Did he complain of the mine being safe or unsafe—did he say it was safe? He said there was too much gas to work in it.
3595. Is it not reasonable to think that when he talked about gas being there the mine was in an unsafe condition?—Did he say that the mine was in an unsafe condition? No, he did not say so, but he said he had to go home several times in consequence of the gas being there.
3596. Well, now if persons go home they do not do so because the mine is safe, but because it is unsafe. Do you remember about what time he had to go home? No, I do not.
3597. You say it was on the Sunday before the accident that he complained to Mr. Sharp? He told me on the Sunday before the accident that he had complained to the overman on the Friday before that.
3598. About a quantity of gas being in the place? He said there was something more there than had any business to be.
3599. What did he say to the overman? He said there was something more than there should be. The overman said, "It is all right." He said, "It is not all right, and I will go and see for myself." He went down and saw Mr. Sharp, and Mr. Sharp said, "What is the matter now, Mos?" He said, "There is something more than common here, and I am going to see for myself." Mr. Sharp said, "Quite right to do so." Mr. Sharp and he went down the dip together, and Mr. Sharp said, "It is all right."
3600. Did he say they went lower down the dip than where the men were working? He did not say how far.
3601. Did they go into your son's place together? I could not say.
3602. Your son could not say that after he saw Mr. Sharp some improvement was made that caused the ventilation to be better? No, he did not say so.
3603. Well, considering the conversations you had had previously with your son, were you surprised when an explosion took place? He had been expecting it. He said he did not want to go down there to be burnt alive if he could help it.
3604. When did he say that? He told me several times before.
3605. He made statements of that kind how often? I could not tell you how often. He said so on two or three occasions.
3606. So that when he made the statement in the hospital that if he was spared to get better he would make somebody suffer for it, the inference which you drew was that he would make somebody suffer in consequence of the unsafety of the mine? Yes; he told me that in the hospital.
3607. *By Mr. Fryar:* Did he say to what part of the mine he and Mr. Sharp went to look for this danger? He said they went down the dip, but he did not say how far, and Mr. Sharp told him it was all right.
3608. *By the Chairman:* You say he said he was going to see for himself? Yes.
3609. Did he tell you that he saw for himself? He went with Mr. Sharp.
3610. But did he say he was satisfied?—He made the statement to you that he would see for himself. Did he see for himself or was he simply satisfied with Mr. Sharp's assurance? He was satisfied with what Mr. Sharp told him.
3611. Then he need not have taken the trouble to go with Mr. Sharp? He did go with Mr. Sharp.
3612. But did he see for himself? I could not say.
3613. You conclude that as he said he would see for himself he would do so and was satisfied. Do you think he did see for himself? I believe he did while he was down.
3614. And he came to the same conclusion as Mr. Sharp—that it was safe. Do you not conclude that? What other conclusion can you come to? He said he would see for himself, and he saw Mr. Sharp and Mr. Sharp went with him. You say further that Mr. Sharp said, "It is quite safe," and he went to work. Do you not conclude that he also saw it for himself and came to that conclusion? That is what he told me. I cannot say any more.
3615. Then we may conclude that at that time your son was satisfied that the mine was safe? Yes.
3616. *By Mr. Rankin:* Did he know anything about gas? I believe he did. He had been working in it a good while.
3617. He never had any other experience outside of Torbanlea? No, I do not think so.

WILLIAM WHITWORTH, miner, examined:

Wm. Whitworth. 3 May, 1900.

3618. *By the Chairman:* Are you a miner? Yes.
3619. Where have you been working lately? In the Queensland Colliery.
3620. Did you know any of the victims of the late accident at Torbanlea? Yes, I knew them all.
3621. Are you a relation of any of them? No.
3622. Did you see any of them in the hospital at Maryborough after the accident? I saw two of them.
3623. Which two? Alexander Houston and Amos Gambie.
3624. Did you see them more than once? I saw Houston twice.
3625. What state was he in when you saw him? He was in a very critical state.
3626. Was he sensible? Yes, he was sensible at the time.
3627. And Gambie? I think he was pretty well at the time. This was on the Friday and Saturday after the accident.
3628. Alexander Houston died on what day? On the following Monday.
3629. You did not see him on Saturday? No.
3630. Did you see Gambie again? Yes, a good few times.
3631. Did Alexander Houston at any time make any statement to you with reference to this accident? No.
3632. He said nothing as to the cause? All he said was that he was anxious to get over it.
3633. He said nothing to you as to the state of the mine or the cause of the accident? No.

Wm. Whitworth. 3 May, 1900.

3634. Now, did Gambie say anything to you? He described it to me as it appeared in the papers; he told me how he managed to get out. I asked him.
3635. Did he tell you how he thought it occurred? He did not say how it really occurred, but he said he was a little distance away from the other men. I think he said he was filling his pipe just at the time, and he heard a noise and then he heard Alexander Houston sing out and say she had caught, and he sang out to his boy to put it out. I suppose he meant put his light out or something of the sort, but he said he could not do it. Then Gambie made a rush, because he knew what had happened. He had not gone far before he was knocked down. He struggled to his feet again, and got to the door, and when he got to the door he got up the dip.
3636. That was his description of the accident? Yes.
3637. Did he make any statement to you as to where the gas came from or what caused the accident? No.
3638. Did he say he thought it was a fall of roof? No, he did not mention anything of that sort. The only cause that he could attribute it to was that the gas had ignited.
3639. He did not say where the gas came from? It was supposed that it was in the old workings below them.
3640. Is that what he said? Yes, he said several times that there was gas there. He said that several times when he has been over here. We have talked over it. I said, "If I was you I would not work there. There will be an accident."
3641. Did he at any time tell you that he considered the mine unsafe to work in on account of the quantity of gas there? Yes, to that effect; he may not have used the word "unsafe," but he said he was frightened of it.
3642. When did he say that last? A couple of weeks or so before the accident occurred.
3643. Was it then he said that? He said it many a time.
3644. Words to the effect that he was afraid of the mine? Yes.
3645. Do you know whether he ever made any complaint to the management that he was afraid of it? Well, only by hearsay; I have heard that he did so, but I never heard him make a complaint to the management.
3646. Did he tell you that he had done so? No.
3647. You were friends? Yes.
3648. And he would probably have told you if he had made a complaint? Oh, I don't know.
3649. But he was as likely to have told you as anybody else if he had made a complaint? If it came to his memory he might mention it.
3650. At any rate, you do not know that he did? Not as a fact.
3651. You do not know whether he did or did not? Only by hearsay; I heard that he did.
3652. You saw him several times in the hospital? Yes.
3653. Did he make any remarks to you there about the safety of the mine? Yes; he said he had dropped into it this time, but he would take good care he never did again, for he would not go where gas was again; not if he knew it. He said that was the first and last time he would be caught in it.
3654. The first and last time he would work in a mine where there was gas? Yes.
3655. But many people work with perfect safety where there is gas? Yes.
3656. His objection was to work in any mine where gas was seen? I do not know about that, but he said he would not be caught again.
3657. Did he say anything to lead you to believe that the colliery was not well ventilated, or was badly managed? No; only that the gas was accumulating there and that he was afraid of it.
3658. Accumulating where? In the old workings.
3659. He did not make any remark showing what he thought about the ventilation of the mine? No; I think the ventilation they had at the time was fairly good in the working places.
3660. We know that there was gas in the mine to a certain extent—what we want to know is whether the management did their best with ventilation to get rid of that gas; you say you never heard him make any complaint as to the management? No, only as regards this gas being there.
3661. You do not know yourself that he ever did make a complaint to the manager? No.
3662. Have you told us practically all he said to you on this question while he was in the hospital? Yes.
3663. That is the whole drift of his remarks, so far as you know? Yes.
3664. *By Mr. Glassey:* Both the Houstons and Gambie and you were on friendly terms? I was with the old man.
3665. That is Alexander Houston? Yes.
3666. How long has your acquaintance continued? As far as Gambie is concerned, for the last fifteen or sixteen years.
3667. Ever since he went into the mine? Oh, yes; before he went into the mine.
3668. And you were frequently together prior to the accident? Well, at times when he has come over here.
3669. How often do you recollect that the late Mr. Gambie complained to you about his being afraid to work in the mine in consequence of gas being there? I could not name the number of times, but several times—three or four times.
3670. Did you see him on the Sunday prior to the accident, when he was over at his father's house? I must have seen him, but I do not know whether I was speaking to him that day or not.
3671. Then, when you heard of the accident, from the conversations you had had with the late Mr. Gambie and the late Mr. Houston, were you surprised at the accident having taken place? No.
3672. Had you been expecting it? I had been expecting something to happen, but I did not expect anything so extensive.
3673. The late Mr. Gambie frequently complained that he was afraid that in consequence of the gas gathered in the old workings it would some day come on their lamps? I inferred that that was what he meant.
3674. Had you any conversations with the late Mr. Alexander Houston on the same thing? No.
3675. Was the conversation which took place in the hospital between you and Mr. Gambie pretty much on the same lines as the conversations which had taken place between you previously? Pretty nearly.
3676. But no statement was made to you by Houston with regard to the matter? No, not to me.

ALFRED WHITWORTH, miner, examined:

Alf. Whitworth. 3 May, 1900.

3677. *By the Chairman:* You are a miner? Yes.
3678. Where are you working? In the Queensland Collieries.
3679. Did you know any of the victims of the late disaster? Yes.
3680. You knew them all? No; a couple of them—Alexander Houston and Gambie.
3681. When did you first see them after the accident? On the Friday.
3682. Where were they then? In the Maryborough hospital.
3683. What condition was Alexander Houston in at that time? Very low, as far as I could see.
3684. Was he sensible? Well, I could not say.
3685. Did you have any conversation with him? No; I did not have any conversation with him. I saw him there.
3686. Now, what condition was the late Mr. Gambie in? He seemed pretty fair on the Friday, as far as my opinion went. He seemed pretty lively—as well as you could expect.
3687. And he was perfectly sensible? Yes; I believe he was at that time.
3688. How often did you see him in the hospital? I saw him, I should say, half a dozen times or thereabouts up to the time he died.
3689. How long did he keep in this fair condition? As near as I can say, I believe he took a change on Saturday morning.
3690. After that he was much worse? He began to go gradually after that every time I saw him.
3691. Did you have a conversation with him on any of the days you visited the hospital? I only asked him how he was and all that, and how it happened.
3692. On the days you had conversation with him he was well enough to talk? Yes; on the Friday and Saturday. On the Saturday he sat up and was reasonable. After that he seemed to get worse.
3693. And after that was his mind wandering to a certain extent? Yes.
3694. Then we will confine ourselves to Friday and Saturday. Will you tell the Commission any conversation you had with him? He would be quite sensible, and if I asked if he knew such and such a man, he would say "Oh, yes."
3695. That was on the Friday? Yes. From that to Saturday he seemed very sensible, but when we saw him afterwards he seemed to wander in his mind.
3696. Did you on Friday have any conversation with him in reference to the accident? Yes, I had a little. He told me that if he got over it someone would have to suffer for it.
3697. That was on the Saturday? Yes, Saturday morning.
3698. Will you try and state as nearly as possible anything he said in reference to the accident or its origin. He made the one statement that if he got better he would make someone pay for it? That is what it amounted to.
3699. Tell us as near as possible what he said? He said if he got better soemone would have to suffer for it.
3700. Did he say anything else? No, I cannot remember that he did. I asked him how it happened and how he got through it as well as he did. He said, when he got the word that she was alight, he went down on his face and there he stayed for a bit, and when he came to rise he found the fire had got him and it burnt his back. He rose a little bit too soon. That was the first fire. Then he said he got up and made for the door at the dip, and he made one rush and that knocked him down. Then he rose again and gained the top.
3701. Did he tell you what knocked him down? No; something knocked him down—the force of the gas or something.
3702. He did not say? No.
3703. In any conversation you had with him at the hospital did he give you his idea of where the gas came from that caused the explosion, or did he say what caused it to be there at that time? No; I cannot say that he did.
3704. Did he say anything with regard to what we might call the management of the mine as far as ventilation was concerned? No.
3705. Did he in any way blame the management for what had happened? No, he did not exactly blame anybody—not to me.
3706. Then what you have told us you heard from his own lips? Yes.
3707. And, as far as you can remember, that is all the conversation you had with him? That is all the conversation I had about the accident.
3708. Now, you had known Mr. Gambie for some time? Yes.
3709. He was what you might call a friend of yours? He was a brother-in-law of mine.
3710. Has he ever expressed to you, previous to the accident, any opinion as to the safety of the mine? Well, he might have done, but it must have been a good bit ago. I cannot say he did lately.
3711. All I want to know is whether he really said anything to you which would lead to the belief that he considered the mine unsafe to work in. Do you ever remember any such conversation? No, I cannot say that I do.
3712. You have known him for many years? This last three years.
3713. And, being a brother-in-law, you would often see him? No; I have not seen him often lately, not as much as I used to do.
3714. Have you ever worked yourself in the Torbanlea Colliery? One day, a long time ago.
3715. You know nothing at all about the mine? No; not to say anything about it.
3716. So far as you can remember what you have told us now is all that he said to you with reference to the mine either before the accident or afterwards? Oh, he has told me any amount about it before in times gone by.
3717. How long ago? It might have been ten or twelve months ago.
3718. *By Mr. Glassey:* You say that ten or twelve months ago he used to tell you a good deal about the condition of the mine then? Well, different places where he had been working.
3719. Did he ever say at that time that he found gas frequently in the mine? No.
3720. He did not express any apprehension or fear? No; not at that time.
3721. That is eleven or twelve months ago? Yes.

Alf. Whitworth. 3 May, 1900.

3722. Since then has he ever mentioned anything about gas in the mine? Not to me.
3723. How often did you see him in the hospital? I saw him, I suppose, half a dozen times. twice on Friday and twice on Saturday, and another morning.
3724. That is twice on Friday and twice on Saturday after the occurrence? Yes; and I saw him after he died.
3725. I think you said, in answer to the Chairman, that he made no statement to you either on the Friday or Saturday, particularly the Friday, when he was sensible, as to what occurred during the time of the accident, except that he fell on his face? Yes; he made the statement I have told you of; that is the statement he made to me, because I was asking him——
3726. But he made no statement to you, except the one in which he said that if he got better some one would suffer? No.
3727. He did not say for what reason? Well, for the explosion, I suppose.
3728. And he did not mention that gas had been accumulating from time to time, and caused the accident? He said he believed it was in the old workings.
3729. Did he say that the same day as he said that if he got better somebody would suffer? No, not that day.
3730. So that any conversation you had before that was eleven or twelve months previously? Oh, no; I spoke with him occasionally.
3731. How long is it since you used to go to his place pretty frequently? Six or twelve months, but during that time I have been at Torbanlea and seen him at his place.
3732. How long is it since you were at Torbanlea prior to the accident? It is a month, I believe.
3733. And he mentioned nothing then? No.
3734. *By the Chairman:* You said you were asking him something in the hospital. What were you asking him about? I asked him what happened, and he told me that he went down on his face.
3735. *By Mr. Glassey:* Were you asking him if he knew of gas existing there any day previous to the accident on the 21st of March? No; he told me in the hospital that he knew the gas was there, and, that he was a bit timid, but he did not think it would come to what it did.
3736. That the accident would not be so severe, or that it would not be so sudden? That it would come at all.
3737. *By the Chairman:* What day did he tell you that? That was on the Saturday after the explosion, when he said that if he got better somebody would suffer.
3738. *By Mr. Fryar:* On the occasion when he made that statement to you, was Mr. Gambie, senr., visiting him with you? No.
3739. You were not together? Yes; he was in the hospital at the time he made that statement. Mr. Gambie went in before me; I went in on Friday, and I think Mr. Gambie went in on the Thursday.
3740. *By Mr. Glassey:* You did not go in together? No.
3741. *By Mr. Fryar:* At the time that statement was made by Gambie was Mr. Gambie, senr., with you? Yes, he was.
3742. *By Mr. Glassey:* When that statement was made? Well, I don't know if he heard it; we two went up together.
3743. *By the Chairman:* Was he at the bedside? I don't know.
3744. Where was he? He might have been outside for anything I know.
3745. But was he? I could not say where he was.
3746. *By Mr. Glassey:* I understood you to say that Mr. Gambie, senr., was visiting his son on the Thursday, and that you visited him on the Friday? I was in on Friday and Saturday; we were at the hospital twice on the Friday.
3747. Did Mr. Gambie and you go together to the hospital on the Friday? We might have gone together; still we were not always in talking to the patient at the same time.
3748. Was Mr. Gambie present with you when his son said that if he got better he would make somebody suffer? I do not think so.
3749. *By the Chairman:* Did he make the statement that he would make somebody suffer, and also the statement that he had seen gas in the old workings, as you told us a little while ago, during the same conversation? Yes.
3750. Was that on the Friday or the Saturday, because when I asked you if he said he had seen gas you said he told you that on the Saturday? Yes.
3751. Was that when the conversation took place in which he said he would make somebody suffer Yes.
3752. Was Mr. Gambie, senr., at the hospital with you on Saturday? Yes, he was there, but he did not come home.
3753. Was he at the hospital? He was at the hospital every time I went.
3754. Was he in the ward with you when that statement was made? No.

SARAH JANE GAMBIE, widow, examined:

S. J. Gambie. 3 May, 1900.

3755. *By the Chairman:* You are the widow of the late Mr. Gambie? Yes.
3756. When did you first see him after the accident? On Thursday morning.
3757. The accident happened on Wednesday afternoon, the 21st March? Yes.
3758. You saw him at the Maryborough Hospital? Yes.
3759. Did he make any statement at the hospital with reference to the accident? Not until the 27th.
3760. That would be on the Tuesday? Yes.
3761. Will you kindly tell the Commission what he said to you on the 27th? I went to his bedside and asked him what he had been saying. I said, "What are these rumours in town that you said the mine was safe"? He said, "I could not have said that, because it is not safe, and has not been for a long time; and if I get better someone will have to suffer for this."
3762. What state was he in then—very low? No; you would think quite well, except that he had been burnt. He was quite sensible and conscious.
3763. Did he make any other statement on that day? Not on that day. I did not stay very long.

S. J. Gambie. 3 May, 1900.

3764. At any other time in the hospital, between the date of the accident and the 27th, did he speak to you much about the accident? No, he only told me it was like a volcano going off.
3765. He did not say anything to you before the 27th as to the mine being considered unsafe? Yes, before the accident he did.
3766. I mean in the hospital? No, only when I asked him what he had been saying.
3767. Before that he had only described the accident? Yes.
3768. I need not trouble you with that. I suppose his description was very much the same as that which has been given already? Yes. They were frequently coming home from the mine.
3769. When was that? At different times.
3770. How long before the accident? About six weeks.
3771. Why did they come home; did he tell you? He used to say the gas was too bad.
3772. Did that happen frequently? Of late. It was not so bad at one time.
3773. What do you mean by "of late"? Just within the last three months.
3774. And when he came home did he tell you it was because he thought the place unsafe? Yes, the gas. I would say, "What are you home for," and he would say "The gas again."
3775. Can you give us any idea how many times this occurred within the last three months. I could not.
3776. Roughly? No, I do not think I could.
3777. You could not say at all? Not to be sure.
3778. Was it once a week, once a fortnight, or once a month—tell us roughly? Four or five times, I think I may say truthfully.
3779. And you are sure every time he came home it was on account of the gas? Yes, he said so.
3780. Did he tell you before the accident that he thought the mine unsafe? He would not be speaking to me. He would be speaking to Johnstone when the matter was mentioned. I heard them saying that there was warm air going round which they did not like. They were talking amongst themselves.
3781. Did he ever report the occurrence of gas to the manager or overman? Well, on the Friday before I believe he went to them and told them that something was wrong. He went to the underground manager first. One of them went with him with a safety lamp, and told him it was all right.
3782. The manager went with him? I believe it was Mr. Caldwell.
3783. Would he not have had an opportunity himself if he was with the manager or overman of seeing whether it was safe or not? I believe he trusted to his word.
3784. Do you know if at any other time he reported anything to the manager? I could not say, but I know the two were talking together at that time.
3785. But you do not know whether he did at any other time, or not? I could not say.
3786. From what you had heard him say, were you at all afraid of his working there? Once or twice I was a bit frightened when he came home and told me. Once I remember he said it knocked him down.
3787. How long ago was that? Within the last three months.
3788. Did the gas explode then? I could not say what it was. He said it was the gas lit or something? A man went in front with a naked light.
3789. Have you anything else you would like to inform the Commission of? No, that is all.
3790. *By Mr. Glassey:* Do you know whether the late Mr. Johnstone, who I presume was your husband's working mate, was in the habit of coming home too? Yes, and my brother too.
3791. What was your brother's name? Frederick Griggs. He was killed too.
3792. Did any of the others come home during this period? Yes, young Carroll.
3793. You say that frequently—several times during the last three months—they came home, and your late husband said it was on account of the gas being found in the mine? Yes.
3794. Did they say they were afraid to continue work? Of late they seemed a bit timid.
3795. After the accident occurred, and when you saw your late husband in the hospital, did he say he anticipated that would be the result? He did not say so to me.
3796. He stated, I understood you to say, that if he got well he would make somebody suffer? Yes, he said that.
3797. Did he say the accident was preventable? He said the mine was unsafe, and had been for some time.
3798. These conversations that you heard were chiefly among the men themselves, in your presence, and in your home? Yes; between Mr. Johnstone and my husband. Four of them were working together. Carroll is the only one left, and he was not in the mine on the day of the accident.
3799. Did he make any complaint as to the time he was kept after the accident, and about necessary comforts not being provided? No, he was all bandaged up. They fetched him here and then brought him away again. He was all bandaged up, but he told me only his arms were burnt and that he would soon be well again.
3800. Did he make any complaint as to the length of time after the accident occurred that comforts were provided for him? No.
3801. *By the Chairman:* You said that four of them were working together as mates? My brother and husband were mates, and Johnstone and Carroll.
3802. When they left the mine did they all go out together? Four of them used to come home. Several times Mr. Carroll has not been down, and the three of them—my husband, brother, and Johnstone—have come home together.

FRANCES EMMA ROTHWELL, sister-in-law of the late Amos Gambie, examined:

F. E. Rothwell. 3 May, 1900.

3803. *By the Chairman:* What relation are you to the late Mr. Gambie? Sister-in-law; I am a sister of Mrs. Gambie.
3804. How soon after the accident did you see Mr. Gambie? On the Saturday.
3805. Was he then in the Maryborough hospital? Yes.
3806. What condition was he in then? He was not so bad as he was afterwards; we thought he was going to get better at that time.
3807. He did not seem so low—he was fairly strong? Yes, we thought he would recover then.
3808. Did you see him often in the hospital? Yes, every day up to the time of his death.
3809. Did he at any time make a statement to you with reference to the accident? Yes, on the Monday afterwards.

F. E. Rothwell. 3 May, 1900.

3810. That was Monday, the 26th of March? Yes.
3811. Was anybody else present? Yes, my sister.
3812. That is the last witness? Yes.
3813. Will you tell the Commission what he said? My sister said, "There is a report in town that you say the mine was safe for working." He said, "I could not have said so; it has not been safe for a long time, and I have told them so, and when I get better someone will suffer for this."
3814. Did he make any other statement? No, I never heard him say anything more.
3815. Did you ask him any questions with reference to the accident itself? No, they told us not to ask him any questions, because it would keep him from getting better.
3816. Did you hear him say in the hospital at any time that he considered there was a good deal of gas in the mine lately? No, they would not let us talk to him.
3817. He did not make that statement at the time he made the other statement you have just mentioned? No.
3818. And during the whole time you saw him in the hospital that was the only statement he made in reference to the accident? Yes.
3819. Previous to the accident did you hear him make any remarks about the mine? I only came up from Brisbane the day one of the men was buried.
3820. Then you live in Brisbane? Yes.
3821. Then you could not have heard anything previously? No; only what I heard by letter.
3822. Did he say anything in his letters? No; only my sister said he had to come home from his work.
3823. *By Mr. Glassey:* You say you live in Brisbane? Yes; lately I have been staying at Wynnum.
3824. Prior to this accident, had your sister and you been in correspondence? Yes.
3825. Did she say anything in her letters with regard to the condition of the mine in which her husband worked? She stated that they came home from work on account of gas.
3826. Have you any of those letters? No; I do not think I have; I always destroy them directly.
3827. Would you mind looking when you go home if you can find any of those letters in which reference is made to the late Mr. Gambie not being at work in consequence of gas being in the mine? Yes.
3828. Will you send those letters, if you find any, to the Secretary of the Commission at Parliament House, Brisbane? Yes.
3829. I understood you to say that your sister, during an interview she and you had with the late Mr. Gambie, told him that there were certain rumours afloat stating that he had expressed himself to the effect that the mine was safe. What did he say in reply? He said he could not have said so, that it had not been fit to work in for a long time, and that he had told them so. I suppose he meant by "them" those in charge of the mine.
3830. And that if he was spared to get better someone would suffer? Yes.
3831. That was the only statement he made bearing on this matter? Yes.
3832. When do you expect to go home? Not for two or three weeks yet.
3833. Is your husband at home? No, he is on the "Merrie England," away in New Guinea.
3834. Is there anyone at home who could look up that correspondence? No.
3835. As soon as you get home will you look up that correspondence, and send it and the envelopes bearing the postmarks? Yes.

JOHN GANNON, miner, examined:

J. Gannon. 3 May, 1900.

3836. *By the Chairman:* What are you? A miner.
3837. Where are you working? In the Queensland Collieries.
3838. How long have you been working there? About four years.
3839. Did you ever work in the Torbanlea Mine? Yes.
3840. How long ago was that? Between four and five years ago.
3841. When you were there did you see any gas in the mine? Yes.
3842. Which part of the mine? Where we saw gas was in driving the stone drive.
3843. You drove the stone drive through the trouble there? Yes.
3844. Did you see much gas? At times I saw gas; on one occasion the gas lit, and the flame was a good size, and from the size of the flame I reckon there was a good amount of gas there.
3845. With good ventilation do you think there was enough gas to be afraid of it? No, not with good ventilation.
3846. Did you see the late Mr. Gambie in the hospital? Yes.
3847. That was on the Saturday after the accident? Yes.
3848. Did he make any statement to you? Yes.
3849. Just tell the Commission what it was? I went into the hospital, the wife was in with me, and we went to see Houston first.
3850. Did he make any statement to you? Not about the disaster.
3851. Then you went to Gambie? Yes.
3852. Well, tell us anything he said about the accident? When I went to Gambie the wife was still speaking to Houston. I said, "How do you feel yourself?" He said, "Those other fellows got the worst of it, I will be about again soon; this is what we have been looking for." I said, "Well, you have got it then." He said, "Yes."
3853. Was that all he said about the accident that day? That was all.
3854. Did you see him again in the hospital? No.
3855. And that was all the statement he made? Yes.
3856. That he had been looking for it, and had got it? Yes.
3857. Were you a personal friend of his? Well, I knew him.
3858. Did you often see him? I saw him occasionally.
3859. During the last two or three months? Oh, yes, I saw him several times.
3860. Did he make any statement to you about the mine during the last two or three months? None at all.
3861. Has he at any time before that made any statement about the safety of the mine? Never.

3862. Then that is all you can tell us with reference to the statements he made to you about the mine? Yes, on that particular morning. J. Gannon. 3 May, 1900.
3863. He never told you before that he thought the mine dangerous? Not before.
3864. *By Mr. Glassey:* Did you have any conversation with Alexander Houston before that Saturday in the hospital? I have had many conversations with him, but never talked about the gas in the mine.
3865. He did not volunteer any statement at any time that he was afraid of gas or an accumulation of gas? No.
3866. That was the only time that any reference was made to the subject either by Houston or Gambie? That morning in the hospital.

(Ipswich.)

THURSDAY, 17 *MAY*, 1900.

PRESENT:

MR. RANDS | MR. GLASSEY, M.L.A.
MR. FRYAR | MR. RANKIN
MR. THOMAS.

MR. WILLIAM HENRY RANDS, CHAIRMAN.

THOMAS JOHNSON, mining manager, examined:

3867. *By the Chairman:* You are the manager of Waterstown Colliery? Yes. T. Johnson. 17 May, 1900.
3868. How long have you been manager there? About three years.
3869. Are you the general manager? Yes.
3870. And the underground manager as well? No.
3871. What experience have you had in coal-mining previously? About thirty years' experience.
3872. Will you state where you have worked? I was at Redbank.
3873. Where is that? About 8 miles from Ipswich, and after that my next place was at Tivoli, working for Mr. Gulland.
3874. How long were you at Redbank? About five years.
3875. How long were you at Tivoli? About eleven years.
3876. And after that? I have been at Waterstown.
3877. Then you have been working at Waterstown for about fourteen years? Yes.
3878. Your experience has been chiefly confined to the Ipswich coalfields? I was working for about eighteen months at Jimbour, for Mr. Joshua Peter Bell.
3879. What were you before you became general manager at Waterstown? I was the pit head man at that time.
3880. And in the other mines what were you doing? I was working on the coal.
3881. Now with reference to the occurrence of gas, have you, since you have been at Waterstown, seen any signs of gas? Yes.
3882. How long ago was that? The first case that I saw was in the Garden seam.
3883. How long ago is it since you saw that? It is fourteen years ago—when I first went there.
3884. Was the occurrence of gas in the Garden seam a common thing? You could see a little. There was not a great lot.
3885. Did it come off regularly? No, only now and again in places where the air was deficient.
3886. In what part of the mine was that—was that in working the whole coal? In the main working rooms.
3887. When you were at Redbank did you see any gas there? I have never seen any gas there.
3888. Did you at Gulland's Tivoli Mine? Yes; I saw it in Mr. Gulland's new pit, in what they call the "new seam." That was against the Tivoli Bridge.
3889. *By Mr. Fryar:* Do you say you saw gas there? Yes.
3890. *By the Chairman:* Has that seam any other name? Just the "new mine."
3891. Did you see gas often there? Only once.
3892. Was it in any quantity? It was in a large quantity, because I got blown out with it.
3893. *By Mr. Rankin:* What do you mean by that? It exploded as we were going into the old workings. My brother and I were together at the time.
3894. Did you get burnt? No, but my brother did. We knocked a hole through at a place that had been standing for years, and which had been blocked up with water.
3895. None of you were severely burnt? No, just a little on the back.
3896. *By the Chairman:* Had this gas accumulated in the old workings that had been closed up? Yes.
3897. *By Mr. Thomas:* I suppose that was the first known instance of gas in the district? That was the first instance.
3898. *By Mr. Glassey:* I think not—gas was seen before that? It was the first I ever heard of.
3899. *By the Chairman:* From the force of the explosion should you say that there was a large quantity of gas? No. It was confined, and when we knocked through the light touched it, and it went off. There was never any more seen after that.
3900. How long ago was that? That is about twenty-two or twenty-three years ago.
3901. *By Mr. Thomas:* If I am not mistaken, I think you drove into Walter Gray's old workings? That was the very place. That had been worked before my time. The coal had been taken out before I came to Ipswich.
3902. *By Mr. Rankin:* You never saw gas until you holed through? No.

T. Johnson. 17 May, 1900.

3903. Not in the Gulland workings? Not until we got into the old waste. Mr. Archibald lit the gas with a naked light.

3904. Did you anticipate gas before you holed through? No, we had seen none.

3905. But was it expected? No.

3906. *By the Chairman:* You saw no gas in Gulland's Tivoli Mine in the open workings? No; I worked the biggest part of the time in the Tivoli old seam, and never saw any gas there.

3907. And when you holed through was there only a small accumulation of gas? That is all.

3908. Were you much burnt? No, I was not burnt at all. My brother was. I ran up the dip. The gas flew out and caught him on the back.

3909. Have you seen any black damp in any of these mines? Yes, many a time.

3910. In which of the mines have you seen it? In all of them. Where the air is inferior you can always see black damp.

3911. Did you get it in any quantities? I have seen it where you could not take a light into it.

3912. *By Mr. Rankin:* Is it not possible for black damp to be there if you have a good current of air on the face? No, black damp will not stay where there is a good current of air.

3913. Suppose you have a good current of air going down the face and gobs, might there not be black damp in some of the places? No, you will never see black damp where there is a good current of air.

3914. *By the Chairman:* Do you find black damp in the waste and gobs—in the old working places? Yes, if the current of air is cut off.

3915. Have there been any accidents that you know of from black damp in any of the mines you have mentioned? No.

3916. Has the ventilation you have had in those mines been sufficient to sweep it away? Yes.

3917. Is the Waterstown mine examined every morning before the men enter? Yes.

3918. Whose duty is it to do that? The under manager and another man with him. If the under manager cannot go a substitute is appointed to go round and make the examination.

3919. And the men are not allowed to enter until he has reported? No.

3920. Where do the men stay until the examination is made? They sit down at the bottom of the shaft.

3921. You say the overman generally makes the examination? Yes, or any other person who may be appointed for that purpose.

3922. Does he use a safety lamp or a naked light in making his examination? A naked light.

3923. Does he enter his report daily in a book? Yes.

3924. Have you that book with you? Yes. [*Daily and weekly report books produced and handed to Commission.*]

3925. Have you met with gas in the Waterstown Colliery? Yes, we have met with gas up in the stone drive and in the lower seam—in the lower Tivoli.

3926. How far is that below the seam you are working at the present time? 258 feet.

3927. Is gas met with there in any quantity? I never saw it there but once, and that was when the accident happened.

3928. What accident was that? The accident to my brother-in-law.

3929. What was his name? John Ferrier.

3930. Will you give us the details of that accident? When we got the shaft down on to the coal I went down to examine it. I thought there was danger of a little gas being there, so I ordered him to go down every morning with the underground manager with a safety lamp, as he was the man who had looked after the fire in the upper seam. We had got all the places through except one, which wanted about 10 feet from being through. There had been men working there on the Saturday, and on the Monday morning before he went I told him to be sure and be careful, and if there was anything wrong not to go in himself or allow anyone else in after he had tried it with a safety lamp.

3931. You say it wanted 10 feet to go through—to go through to where? To the other air-course which was going down the pit.

3932. Well, what happened? I told him if there was anything wrong not to go into the place, but to help Jonathan Shields in the air-course. We wanted to get the air round with a brattice. He went there and found he could not get up, and sending his Davy lamp up he went round to Shields. He did not stop there long, but went back to the place where the accident occurred, and thinking it was only a bit of black damp that was there he tried to waft it out, and in doing so wafted the gas down on to his naked light.

3933. Did he take the safety lamp into that room? He did take it in in the first instance, and, as I have said, he found the place was not fit for anybody to go into. He thought there was black damp there, but not fire damp, and did not allow anyone to go into the place. He sent his Davy lamp up to the upper seam, and went to help Shields in the next place to put it through, but he was too anxious, and thought that if he could get into the other place he would get it through quicker.

3934. *By Mr. Glassey:* Did he find both black damp and gas in the one place? No, he never saw the gas at all.

3935. Then why did he take the bag to waft it out if he did not see the gas? He mistook it for black damp; he thought there was black damp there, and went back to clear it out.

3936. And instead of that he cleared out the gas? He cleared the gas down on to his own naked light.

3937. Is it a usual thing for gas and black damp to be found in the same place? Yes, you will find the gas in the roof and the black damp on the floor.

3938. Is that your experience in mining? Yes.

3939. *By the Chairman:* Did what you have described happen on a Monday? On the Monday morning.

3940. *By Mr. Fryar:* Is the place you refer to on the level, or going to the dip from the rise? Going to the rise.

3941. What is the gradient? It is about 1 in 6.

3942. How far up was that room? About 20 yards.

3943. Was it up far enough to catch the level that was going into it? Yes.

3944. Had a man been working in it on the last working day? Yes, two men had been working in it on the Saturday, and I was in myself till 8 o'clock on Saturday night.

3945. *By the Chairman:* Had gas been seen there previous to that? Well, I just saw a little, and that is the reason I ordered a safety lamp to be taken in.
3946. About how long ago was it that this accident occurred? About three years ago, I think.
3947. *By Mr. Glassey:* In the month of August, 1897? Yes, I think about 23rd August, 1897.
3948. *By the Chairman:* And this accident resulted in the death of your brother-in-law? Yes.
3949. Was he in the place by himself at the time the accident occurred? He was there by himself at the time.
3950. Was he killed right out? No, he lived for two days, and died in the hospital.
3951. And is that the only time gas has been seen in the Tivoli seam? That is the only time any quantity was seen.
3952. But you do see gas now and again in working that seam? I saw a little when we started from the shaft, and I then ordered the Davy lamp to be used.
3953. And after that was the seam always examined with a safety lamp in the morning before the men entered their working places? Yes, every morning before the men were allowed to go down into the workings. That was done until we knocked off there.
3954. Did any other accident ever occur there? No, after the air-course went through never a bit more gas was seen.
3955. Had you not worked the upper seam in that colliery? Yes, that is the one where the men had to go round with a safety lamp.
3956. What is the name of that seam? We called that the stone drive seam because it is further up the shaft.
3957. Is it not called the fiery seam? No, we call it the stone drive. There was one place we opened up near the road which was called the Edina seam, but where we opened it up down the main shaft we called it the stone drive.
3958. Was much gas seen in that seam? Yes, there was a fairish bit, but when there was any current of air travelling you did not see it. If the air was cut off you would see a little.
3959. Did the gas come off regularly? Yes, it was always there.
3960. Did you have any blowers? Yes, we saw little bits of blowers, but there was no great force in them.
3961. But as a rule was the gas given off regularly from the whole coal? Yes.
3962. Was that seam examined every morning? Yes.
3963. With the safety lamp? With the safety lamp.
3964. Before the men entered? Yes. That is what Ferrier used to do.
3965. Did any other accident occur during the working of that seam? No.
3966. Was the gas ever lighted at all? You could light it just a little.
3967. What is the name of the seam you are now working? They call that the Waterstown seam.
3968. Have you ever seen any gas in that seam? I only saw one little bit in the crosscut you were down the other day. There was just one little bit of a jet. You could just notice it, and that was all. We have never seen a particle since.
3969. *By Mr. Glassey:* But that is an indication that there is gas there? That is more than I could say.
3970. *By the Chairman:* Have you ever heard of any gas being seen? No.
3971. From which part of the Edina seam did the gas come off chiefly? We were only working on one side of the shaft.
3972. But was it from the top or bottom, or all over? Mostly from the top. If there was a little bit of a crevice in the roof you would see it.
3973. And where did it come from in the lower seam? From the roof.
3974. How is your current of ventilation produced? By means of a furnace.
3975. Do you know what quantity of air you have? Well, I could not say that.
3976. Have you ever tried it? No.
3977. What method of working have you there? I have the plan here. [*Plan produced.*] There are roadways and air-courses in every working place.
3978. I want to know what system you work? Stoop and room.
3979. How often do you make up your plan? It is made up now to the 2nd May.
3980. *By Mr. Glassey:* When was that plan commenced? 13th December, 1897.
3981. Is that the time the accident occurred? Yes.
3982. There were no plans before that? There were no plans before that.
3983. *By Mr. Fryar:* But this plan is not a plan of the bottom seam? Yes, the bottom seam and all.
3984. *By the Chairman:* This plan shows the whole workings? Yes.
3985. Have you ever had any complaints from any of the men with reference to the ventilation? No.
3986. Has the overman, to your knowledge, ever had any complaints? No.
3987. Have you had any experience in working long wall? No; I never worked long wall. It has been all stoop and room wherever I have worked.
3988. Then, without having had any experience of long wall, you cannot say whether it would be better to work long wall than stoop and room? I think it is better to work stoop and room.
3989. But, having had no experience of long wall, you cannot give any very decided opinion? I think stoop and room is far the best system in places like ours. It is always a support to the roof to leave a stoop.
3990. But in long wall the roof is allowed to come down behind? Well, I like to keep it up as long as I can myself.
3991. *By Mr. Rankin:* In the place where gas was met with they were driving to the places, one to meet the other? Yes.
3992. Was one going up hill, and one the other way? Yes.
3993. You were going down to meet the one coming up? Yes.
3994. Was it in the one going down or in the one coming up that you met the gas? It was in the one going up hill that the gas was met with.
3995. There was no gas met in the one going down hill? No; we had the full current of air there. We were within 10 or 11 feet of getting through, and then we would have had the air all round the place.

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3996. The man who lit the gas went round to assist in holing through? Yes; he reckoned he was going to give a knock to Shields to be sure they were going straight. I believe his intention was, after he had got the damp out, to go into the room and help to meet Shields on the other side.
3997. *By Mr. Fryar:* How long had you been working that seam before the explosion took place? About six weeks.
3998. Was there a level driven in from the shaft? There were two; one on each side.
3999. *By Mr. Glassey:* Two main levels? Two main levels right from the shaft.
4000. *By Mr. Fryar:* How far was the level in on the side on which the explosion took place? About 20 or 25 yards.
4001. And was the room broken off that level? Yes, about 19 yards from the shaft. The pillar was left as a side for the shaft.
4002. Then the face of the level would only be a very few yards opposite? Yes.
4003. Was there a man working in that level? There were two working there, and Ferrier ordered them not to go out until he told them.
4004. What was his reason for ordering them not to go out? For fear there might be any black damp.
4005. *By Mr. Rankin:* Do you mean that he ordered them not to go out to their work, or not to go out from the face? Not to go out from the face until he had cleared away the black damp.
4006. *By Mr. Fryar:* Did Mr. Ferrier expect to be killed with the damp then? No, he did not.
4007. But if he expected that it would hurt those men he must have contemplated that it would hurt himself? He was doing what he did to avoid danger; if there was any black damp he was going to waft it out and clear it up to the shaft before the men came to the bottom of the shaft.
4008. Is it usual for black damp to lie up the rise? Yes, I have seen it up the rise and anywhere else where there was not a current of air to shift it.
4009. If you were going up the rise and you found the lamp would not burn, would you think it was black damp or explosive gas? I should think it was black damp.
4010. Were there any more men in that level than those three men you have mentioned? No.
4011. Were there any boys wheeling? No, there was only that room and the level, and, of course, when Ferrier went into the room there were only two men in the level.
4012. How many men were there working on that seam on that occasion? I think about eight; there were two in the other level, and two driving the heading up above, and there was Jonathan Shields.
4013. Had you any cautions about the probability of getting gas there? Yes.
4014. *By Mr. Glassey:* From whom? From Mr. Fryar.
4015. *By Mr. Fryar:* Before the shaft was down to it? Yes.
4016. And afterwards? Yes.
4017. Had the inspector been down after you got the coal? Yes.
4018. Referring to the black damp you saw some time ago, how far was that from the surface of the ground? That seam is about 500 odd feet.
4019. From the surface? From the surface, 320 and 250 feet.
4020. I am speaking of the black damp you saw at Gulland's long since? I saw black damp in all the mines I have worked in.
4021. You said something about seeing black damp in some special place—was that in Gulland's? Yes.
4022. How far was that from the surface? I cannot tell you the distance.
4023. Where was that particular mine of Gulland's? The old Tivoli.
4024. That is up where the Staffords are working now? They are not working the same seam, but it is in the same paddock.
4025. Was there a shaft there, or a tunnel? There were both; they were working a shaft first, and they were working a tunnel when I went there.
4026. Have you any idea of the depth of the shaft? About 80 feet.
4027. *By Mr. Rankin:* Was it the shaft or the tunnel that you saw black damp in? I saw it in the tunnel.
4028. *By Mr. Fryar:* Were they connected? They were not connected at that time.
4029. Then the tunnel would not be down as deep as the shaft in that case? No.
4030. In your experience is black damp seen near the surface, or in deeper places? I have seen it in both deep and shallow places.
4031. Do you know whether it is more often seen near the surface, or in deep levels? That I have never taken notice of.
4032. But you have seen it in both places? Yes, I have seen it where we have been putting holes through in places where there has been no air.
4033. *By Mr. Glassey:* How long have you been general manager? About three years. I was appointed by my brother just before he died; that is a little over three years ago.
4034. As general manager, do you think it is your duty to take notice of both black damp and explosive gas in mines? Yes.
4035. I understood you to say, in answer to Mr. Fryar, that you did not take particular notice of those things? I did not when I was at Gulland's.
4036. Who was the general manager at Waterstown before you? My brother, John Johnson.
4037. Did he keep a report book with regard to the general condition of the mine? I don't know.
4038. You are not aware of any book being kept for the purpose of records with regard to the condition of the mine? Yes, I saw one book in the office with some records in.
4039. Have you examined that book? Yes.
4040. Did you see any reference in it to gas being found in the mine from time to time? No, not that I am aware of; but I never took much notice of the book. I did not deal with anything but what occurred after I got the management of the mine myself. Before that I was a working miner.
4041. When you became general manager of the Waterstown Colliery did you pass any examination or test as to your capabilities for the position before you were appointed? No.
4042. You were not asked to do so? No.
4043. The person under you, the underground manager or overman underground—was he put through any test as to his capabilities before he was appointed? No.
4044. Is it his duty to examine the mine as to its safety with regard to gas and other matters? Yes.

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4045. Has he had any experience of gas? Yes.
4046. Where? At Waterstown.
4047. How long has he been in that position? As underground manager?
4048. As underground overman? As nearly as I can say, about two and a-half years.
4049. That is from six months after your appointment? Yes.
4050. When you made that appointment, did you make it in consequence of his exceptional ability? Yes.
4051. Did you put him in that position without ascertaining whether he was capable of judging of gas in all its phases? I know he was used to it; he has gone many a time in Ferrier's place.
4052. What was your standard or test of this man's capabilities? My standard or test was that I knew that if he was taken into a place he could tell whether there was gas there or not, and whether it was safe for men to go into it.
4053. I understood you to say that the underground overman examines the mine every morning with a safety lamp? No; he does not.
4054. Not even since the explosion in 1897? Of course he always went down with the underground manager, and Mr. Shields and another man with him also went down.
4055. I understood you to say that in the seam you are now working you discovered a small quantity of gas in some little cavity in the roof? That was over two years ago.
4056. Now, gas having been known to exist in the mine in the lower seam, and a small quantity of gas having been discovered in the present seam, do you think it is a proper thing to examine that mine in the morning with a naked light? I do not think there is any necessity for examining it with a safety lamp.
4057. Why? The amount of gas was so small, and it has never been seen since. There has been none seen in the coal or in any of the old workings.
4058. And might there not be a quantity seen? I don't think so.
4059. You think it is impossible for gas to exist there? Of course you cannot say it is impossible that it does exist there; you do not know what you are going to get in front of you.
4060. But having observed a small quantity of gas there, do you not think it is likely that you may ultimately have large quantities? I do not think we should in that seam.
4061. Why? Because it has been worked for sixteen years, and no gas has been seen since the time I have referred to.
4062. Are you aware that seams have been worked for three times sixteen years without gas being seen in them, and that afterwards gas has been found? That may be; you may get small quantities of gas.
4063. From your experience as a working miner and manager, having already seen gas in small quantities in the mine, do you think it is a proper thing to examine the mine in the morning without a safety lamp? I have seen only small quantities of gas in that place.
4064. Then, you think it is not necessary to examine the mine every morning with a safety lamp? I do not.
4065. Supposing you had large quantities of gas there, and you were to examine the mine with a naked light, what would happen? The gas would explode.
4066. And would it not be wise to prevent such an explosion? There is no doubt that it is always wise to prevent explosions.
4067. I want to get your opinion as to whether it is not wise to establish a system which will prevent explosions? Yes, I should say that would be all right in places where there was any gas worth while bothering about.
4068. How do you know what you are going to meet to-morrow morning? As long as you have a current of air, there is no danger from gas in places where it is in such small quantities.
4069. But there are places, I understood you say, where the air cannot reach? There are times when you are cutting through when there is not as much air as you could wish.
4070. Is there any likelihood of gas being found there? We have never seen it.
4071. Is there not a likelihood? I do not think so.
4072. I mean where the current of air does not reach? Not in that seam.
4073. In this seam, where the explosion which resulted in the death of Mr. Ferrier took place, what distance were the levels in from the main shaft? One was about 25 yards.
4074. Were you just opening up the main seam? Just opening up.
4075. And was it a heading where the explosion occurred? No; a room broken off one of the levels.
4076. And in that room you found black damp? Yes.
4077. Black damp so near the shaft? Yes.
4078. Had you no ventilation there? There was a little, but one side had a greater current than the other.
4079. Do I understand you to say that although you had only been working there for six weeks in opening out the mine, and you were only a short distance from the shaft, the ventilation was so defective that you were troubled with black damp? Yes; there was black damp in that place.
4080. What was the cause of the black damp? Want of ventilation.
4081. Who was responsible for the defective ventilation? I was to a certain extent, but in all new places you have to run a certain amount of risk before you can get the ventilation in.
4082. Why? You have to get a way in which to carry the air round.
4083. Had you no means? I was trying to get one as fast as I could. We were working night and day to get it through.
4084. Do you as manager of the mine mean to tell us that, being only a short distance like that away from the main shaft, you had not an abundance of fresh air and a means of bringing it to where the men were working? Yes; I had plenty of air round one side.
4085. Do you tell the Commission that you were unable to ventilate these places sufficiently to keep out the black damp? The black damp got there, and we never had any before. It had been all clear. Had the men gone on working another shift they would have been through. I did not expect it to be as bad as it was.
4086. Was it not the want of reasonable expenditure in carrying your air to the working places that caused the black damp to accumulate, and ultimately the gas? It was not for want of expenditure, because I was at liberty to do as I thought proper.

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4087. Was it want of judgment on the part of the manager? No, I do not think so.
4088. You had abundance of expenditure, and abundance of judgment, and yet black damp was found such a short distance from the shaft? We all know there is a certain amount in every mine before you can get the proper air courses through.
4089. What is to prevent you getting the proper air through? You have to get a way to carry it round.
4090. I admit that, but had you not a way to carry it round? We had no way until we cut this air-course through. There was air, but it was a very small quantity.
4091. Why was it a small quantity? Because one side of the shaft had a greater pull than the other side.
4092. Could that not have been regulated? Yes, it would have been regulated if my orders had been carried out and he had done what I ordered him to do.
4093. Whom did you order? Mr. Ferrier.
4094. Then he declined to carry out your instructions to keep the mine clear and wholesome? He acted contrary to my orders. He did not do as I told him. He was anxious, I think, to get the thing through.
4095. How long had he ceased to obey your orders? That was the only time.
4096. You say it is a usual thing for black damp and explosive gas to be in the same place at the same time. On what do you found your opinion? I found it there.
4097. Do you think either will exist if you had sufficient ventilation? I do not think so.
4098. Then the ventilation was deficient? Just so.
4099. I understood you to say that prior to the 1897 explosion which caused Ferrier's death, you had no plans of the mine? No.
4100. Did you know that it was the law of the country to have plans? Yes, I did. Of course, I had been a very short time as manager. I was only just starting. I had nothing at all to do with the management previously. There might have been plans there. My brother might have had plans.
4101. But is it usual to stow these plans away where they will not be visible to a new manager? I did not ask him for the plans. I knew he had had a survey made, and had surveyed the mine himself.
4102. Who surveyed the mine? Thomas Archibald surveyed it once, and my brother surveyed it.
4103. How long ago was that? A good few years ago.
4104. Who surveyed the mine and prepared the plan which you produce? Mr. Atkinson.
4105. Who is he? A surveyor.
4106. Now, who keeps the workings posted on this plan from time to time? Mr. Atkinson.
4107. Does he go down there? Yes.
4108. And surveys the mine himself? Yes.
4109. And he does this for you as manager? Yes.
4110. How often is he down? The last time he was down was on the 2nd of May.
4111. And the time before? I could not tell you the date.
4112. You keep no record of those things? Yes, I think it is in the book.
4113. Coming to that unfortunate occurrence by which Mr. Ferrier lost his life, I think I understood you to say that the board was up about 20 yards from the main level? Yes.
4114. The air being deficient in the main level, you might expect it to be deficient in the board? The air was pretty fair in the main level, but it wanted a stronger current to bring it along to the other places.
4115. Where was this black damp that Mr. Ferrier went to waft out? In the room.
4116. Right up to the face? No, he never got to the face. He could not get to the face with the safety lamp.
4117. In consequence of the fire damp? He never noticed the fire damp.
4118. In going to waft out the black damp he wafted out a lot of fire damp? Yes.
4119. So that the black damp and the fire damp were in one room? Yes.
4120. That is most extraordinary? It was so there.
4121. What hour of the day did that accident occur? About 9·30 or 10 in the morning.
4122. Was the mine examined on the morning of the accident? Yes.
4123. Was that particular place examined? Yes.
4124. And found to be safe? No, it was not reported to be safe.
4125. This man who went down was the fireman? Yes.
4126. And when he found the place was not safe he commenced wafting out the black damp? He sent the Davy lamp up to the surface, and went with Shields into this place where I ordered him to go. Then about 9·30 he said to Shields, "I will go round and give you a knock."
4127. He went round to give Shields a knock, and then he discovered black damp? He went with a bag to waft the damp out, and he hung his lamp on a prop. It was quite clear within a few yards of the room, but not near the face. He went to waft the black damp out, and that was the reason he ordered the other two men not to come out until he told them.
4128. He discovered black damp in going round to give Mr. Shields a knock? Yes.
4129. And he then set to work to waft the black damp out? Yes.
4130. And in that operation he wafted out some gas? Yes, fire damp.
4131. Was it known that fire damp existed in that seam before the explosion took place? Just this small bit, and that was the reason I ordered a safety lamp to be used the first thing that morning. Two men used to go down every morning.
4132. And they examined the mine with a safety lamp? Yes, before the miners went down.
4133. How long did that continue? That continued always—after the second day we started on the coal—as soon as I began to see this oozing of blowers and jets. It was so small that you could just perceive it, but that was the reason why Ferrier was told to go down every morning and examine the place before the men went in.
4134. And that continued right up to the time of the explosion? Yes, and until the place was stopped.
4135. How long did you work that seam? About twelve months.
4136. That is a little more than ten months after the explosion? Yes.
4137. Had Mr. Ferrier, to your knowledge, any previous experience of gas in coal mines? Yes.

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4138. Where did he get that experience? At Waterstown.
4139. But he had no experience anywhere else as far as your knowledge goes? No. He was the man who was picked out for that duty for, I suppose, three years.
4140. Was Mr. Ferrier a married man? Yes.
4141. Did he leave any family? Yes, a family of two children.
4142. When that explosion took place, did you make an entry of it in your book? I could not be sure now that I did.
4143. Don't you think that an occurrence of such gravity should find a place in your report book? Yes.
4144. During the ten months that the mine continued working after the explosion, did you ever discover any fire damp? No.
4145. Or any black damp? No.
4146. What was the cause of the sudden change? As soon as ever those places were cut through the air got round, and there was never any more trouble.
4147. How many men had you working on that seam latterly? Twenty-eight.
4148. And every place was examined with a safety lamp right up to the time of the stopping of that seam? Yes.
4149. I think you stated that the late Mr. Ferrier lived for two days after the accident? Yes.
4150. Did he make any dying depositions? Yes.
4151. Can we get a copy of those dying depositions? He said he made a mistake. The first thing I said to him was, "Whatever put this into you head after what I said to you this morning? I told you to be careful in that place this morning, because it was dull weather, and it might be a bit thick, and that if you saw any danger at all, you should not allow anyone to go in, or go in yourself, but go and help Shields."
4152. Was the furnace out during the Sunday? We had not got the furnace then; we had a fire bucket just to act as a furnace until we got the main furnace in. We could not get the furnace in until we got those places through. I had a brick furnace put in when I got those places through.
4153. On account of the appearance of the morning, you cautioned Mr. Ferrier that there was a possibility of gas being met with there? Yes; I told him to go down with his lamp, and be sure that the place was safe.
4154. Do you keep a barometer at the mine to test the pressure of the air? No. But you know that there is more likely to be gas after the mine has been standing still on a dull day than there would be in clear weather.
4155. But you don't keep a barometer at the mine to test the pressure of the air? No.
4156. I think you said, in answer to the Chairman, that your system of creating a current is by means of a furnace? Yes.
4157. Where is that furnace located? It is on the high side of the shaft, about twenty-five yards from the bottom.
4158. Is it a large furnace? Yes; it is two boilers now.
4159. What is the largest number of men you have ever had employed under you since you have been manager? About forty-five.
4160. Do they generally work in one particular part—are they concentrated, or are they divided? We have the two seams. We had very few in the old seam, because I had to put that crosscut down before I could get in.
4161. You say you keep no record with regard to the number of cubic feet of air circulating in the mine? No.
4162. Don't you think it would be wise to keep a record of that kind? I don't know that it is material to keep a record of what the current of air is that is going through the mine.
4163. When the men are working in batches in different parts of the mine, what system have you of conveying a quantity of fresh air to each particular section? We convey the air by brattices until we get the air-course properly in.
4164. Supposing you had forty-five or fifty men working in the place we visited, and they were working in different sections, what method would you use for conveying a quantity of air to each of the different sections? By bratticing until we got the air-course through.
4165. You mean that you would convey the air round to each section? Yes.
4166. You don't split the air? No.
4167. So that the men in the last section will get vitiated or polluted air? They can get fresh air.
4168. How can they get fresh air after it has passed the other men? There is always fresh air going through.
4169. Do you think the last section of men can get pure air after it has gone round to the other men before it has reached them? Yes.
4170. You think it does not become vitiated or polluted in consequence of travelling through the different places where other men are employed? I do not think it is necessary to split the air in so many places.
4171. Did Mr. Ferrier get any compensation from the company? No.
4172. Do you keep any fund at your mine to provide for such accidents when they arise? We used to insure the men.
4173. Was Mr. Ferrier insured? Yes, but not by the company; the men were not insured by the company at that time.
4174. Are they insured by the company at the present time? No.
4175. What insurance then do you allude to? We did insure them at one time.
4176. When was that? A little while before this accident happened.
4177. How long before that happened were the men insured? About two years.
4178. In what office were they insured? That I could not tell you, because I had nothing to do with it.
4179. And you do not know for what amount the men were insured? No.
4180. They are not insured now? No.
4181. Therefore there was no compensation paid to Mr. Ferrier? No.

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4182. Would you favour the establishment of a fund from which dependents of persons, like the dependents of Mr. Ferrier, should receive some monetary aid when accidents of this kind occur—a fund to which the employers should contribute? I don't think it would be a bad idea.

4183. Do you think that ½d. per ton would be an exorbitant amount for employers to pay in such cases? No.

4184. *By Mr. Rankin:* Do you understand the question—would you be willing to pay ½d. per ton on all coal coming out of the pit to such a fund, and for the men to pay nothing? No, the men should pay a little, too.

4185. *By Mr. Glassey:* Would you be favourable to colliery proprietors paying ½d. per ton to make compensation to the families of miners in such cases as that of Ferrier? No.

4186. Do you think the families of miners should get compensation at all in such cases? I think they should get compensation if the accident is due to the negligence of the employer.

4187. You say you do not favour the establishment of such a fund as the one to which I have alluded? It would be very fair if the men helped a little too.

4188. Would ½d. per ton be an exorbitant charge for the proprietor's share? No, I don't think it would.

4189. I understand you to say that some twenty-two years ago you saw gas in a mine owned by Mr. Gulland? Yes, a mine opposite Mr. Archibald's place.

4190. You say there was not very much of it? No.

4191. Had it been seen from time to time? No.

4192. Only that once? Only that once, when we were driving into some old workings which had been standing with a lot of water in them. After the water got down below the level of our dip the gas fired. Mr. Archibald himself came with a light to try it.

4193. So that the gas was evidently lodged in the old workings? Yes.

4194. And when the old workings were holed into there was a small explosion? Yes, after the water was taken out.

4195. In mixing with your fellow-workmen at that particular time did you hear them say that gas had been found in other mines in that neighbourhood? No.

4196. Were there any other mines working there then? Yes, the old Tivoli mines. That was the first gas I ever saw.

4197. So that your knowledge of gas is limited? That is twenty odd years ago, and I have seen gas in various places since.

4198. In the Waterstown mine? Yes.

4199. You have seen gas from time to time during the last twenty years in the Waterstown mine? No, not during twenty years. I was in the Tivoli mine the first time I saw gas, and I have seen gas from time to time during the last twelve or thirteen years in the Waterstown mine.

4200. You have seen gas during the last twelve or thirteen years in all the mines? Yes.

4201. *By Mr. Rankin:* You have never had any experience of large quantities of gas in this district? No.

4202. Or in other districts? No.

4203. All you have seen was little parcels of gas from time to time? Yes.

4204. Which you considered not dangerous? No, not dangerous.

4205. And even now you do not consider any gas you have seen is dangerous enough to cause you to examine the place with a safety lamp every morning? No.

4206. You experience is very limited as regards gas in large quantities? I have never seen any large quantities.

4207. *By Mr. Fryar:* With respect to the shaft, was it divided into two compartments? Yes.

4208. Did you use two cages? Yes.

4209. Was there a third compartment partitioned off with canvas? It was partitioned off with boards. There was one partition forming the upcast and downcast, there was room for two cages, and then there was another partition.

4210. What came of that third compartment—was it connected with anything else? No, it was for the upcast.

4211. What would be the use of an upcast if it was all mixed up at the top? There was an air-course from the new shaft to the old one.

4212. Was that upcast shaft connected with the return in the big shaft? Yes.

4213. It went over to the furnace? Yes.

4214. *By Mr. Glassey:* What was the distance? About 30 yards.

4215. Between the intake and the main upcast? Yes.

4216. *By Mr. Fryar:* So that to that extent there was a furnace connected with the lower seam? Yes.

4217. *By Mr. Rankin:* Had you any communication made at the time of the accident? No, not at the time of the accident. We were cutting a place out for the furnace.

4218. *By Mr. Fryar:* What we want to know is whether there was communication with the furnace and the upper seam? Yes, there was communication with that.

4219. What we want is a plain statement of fact. We want to know whether that upcast from the lower seam was connected with the furnace in the upper seam? Yes.

4220. At the time of the accident? Yes.

4221. Why did you not explain that to Mr. Glassey? I thought he referred to the lower seam.

4222. *By Mr. Rankin:* You had the upcast connected with the furnace, and you had an airway to take the air away from the bottom of the shaft? Yes.

4223. *By Mr. Glassey:* So that there actually was communication between your upcast and downcast? Yes, it was the first thing done after the shaft was sunk.

4224. And what was the distance between them? Twenty-five to 30 yards, and we had a furnace in the old seam.

4225. Now, having all these appliances for conveying air, why was the air deficient at this particular place? Well, as I told you, one side had a greater pull than the other, and we only had to drive a few more feet when all difficulty would have been overcome.

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4226. Supposing the pressure was deficient, had you no means of remedying it? Yes, and if I had thought it was going to get bad I would have remedied it. The accident never should have occurred if Ferrier had done as I told him.
4227. *By the Chairman:* Did you not say that you instructed him not to go to that place? I did. I told him to take the safety lamp to see if it was all right, and if there was any danger to allow no one to go there.
4228. And he had no business to be there? No.
4229. *By Mr. Glassey:* But the gas had no business to be there. With the appliances you had at command neither gas nor black damp should have been there? I had sufficient facilities to bring it out, and there was no danger if he had kept away.

JONATHAN SHIELDS, miner, examined:

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4230. *By the Chairman:* What are you? A coal-miner.
4231. Where are you working? At Haighmore—Stafford Bros.
4232. How long have you been working there? About eighteen months.
4233. Where were you working before that? At Waterstown.
4234. How long were you working in Waterstown? Between five and six years, as near as I can say.
4235. And how long have you been employed at coal-mining? In ironstone and coal-mining together I have been about twenty-six years.
4236. Have you been employed in the old country? Yes.
4237. In what part? Yorkshire, in the Cleveland district.
4238. Were you working entirely in the ironstone mines? Yes.
4239. Not in coal-mines? Not in coal-mines.
4240. And when did you come out here? I have been out here about fifteen years.
4241. Have you spent the whole of your time in this district? No; I have been in the Illawarra district of New South Wales, and in the Newcastle district.
4242. And you have been in this district about seven years? Yes; I was here for five years, then I went to New South Wales, and have been back about seven years.
4243. What seam were you working at when you were at Waterstown? Both seams; the top one and the bottom one.
4244. You have not been on the one they are working now? Yes, in the present seam.
4245. Then you have been in the three? I have been in the two bottom ones.
4246. Did you see any gas when working in the bottom one? Yes; that was when Mr. Ferrier was burnt.
4247. Did you see gas often? No.
4248. How often have you seen gas there? I have seen a little fire damp now and again if I happened to be sinking a hole for a prop or anything like that. That was in the bottom seam.
4249. And how long had that seam been worked at that time? About seven weeks at that time. That was before the accident.
4250. You say you saw gas before the accident? Just one small blower; it was a mere nothing.
4251. Were you down the mine on the day of the accident? Yes.
4252. Where were you at the time of the accident? I was working opposite to where Mr. Ferrier was going round. He was going round at the time of the accident to give me a knock.
4253. You were working opposite to him? Yes.
4254. In the room working down from the level above? Yes; I was putting a cut through.
4255. You were working that room to the rise? Yes.
4256. How far was it up at the time? From 17 to 20 yards, as near as I can say.
4257. Had Mr. Ferrier been in that room before that morning? Yes.
4258. Did he tell you what he found there? He said he had been in with the safety lamp, but he could not get up the room very far. I think he thought there was just a little black damp on the floor.
4259. Did he tell you why? No; he did not tell me why.
4260. Did he tell you not to go in there? Well, he did not tell me not to go in, but he warned some of the others who were working near hand.
4261. *By Mr. Fryar:* You could not get in without going where you had no business? That is it; Mr. Johnson left orders for no one to go in there.
4262. *By the Chairman:* When Ferrier left you, what did he do? He went to the upper seam to get his breakfast, and then he was going to give me a knock.
4263. *By Mr. Glassey:* What reason did Mr. Johnson give for warning you not to go into that part? He gave no reason.
4264. *By the Chairman:* Then Ferrier went to the upper seam to get some breakfast? Yes.
4265. Did you see him again after he had his breakfast? Yes.
4266. What did he say then? He told me he was going round to give me a knock. I asked him if he had a lamp with him. He said, "No, there is a little foul air there, and I will knock it out with a bag." And he said he would give me a knock to see how far we were from being through.
4267. What happened next? About four or five minutes after I heard the explosion.
4268. And what did you do? I ran from there to the pit bottom. Mr. Dick Johnson was working a little way off, and I shouted to him. We got to the bottom together, and got the cage down as quickly as we could, and I asked the men if they had seen Mr. Ferrier. I could see a light coming when I got through the brattice. Ferrier was sitting about 4 or 5 yards from the pit bottom, and when I asked about him he said, "I'm here, I'm burnt."
4269. Were there any special means for ventilating that room? Yes, I think it could have been done.
4270. But was it done? There was a brattice in.
4271. *By Mr Glassey:* Was it into the face? As far as there was a gob built there was a distinct partition of the way; with the bratticing, the gob, and the refuse there was a distinct separation.
4272. *By the Chairman:* How far would that be from the face? Thirty or forty yards.
4273. *By Mr. Rankin:* From the face? No, from the old timber.
4274. *By the Chairman:* How far from the face was that gob? Five or six feet.

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4275. How do you account for the air not getting round the other places? I could not say.
4276. *By Mr. Glassey:* Was the gob up to the roof? Yes, and there was a partition across the roadway, and a brattice on the level as far as the room.
4277. By brattice do you mean canvas? Yes.
4278. There was no canvas carried up to the face of the room? No.
4279. *By the Chairman:* The brattice from the gob was within 6 feet of the room? Yes.
4280. *By Mr. Rankin:* Was the gob anything like air-tight? Yes, it was. I can say that, for I examined it after the accident, but of course not with a naked light.
4281. *By the Chairman:* Did you work that same seam afterwards? Yes.
4282. For how long? Three or four weeks.
4283. Three or four weeks only? I could not be certain, for I have left some time.
4284. Did you see any sign of gas after that? No.
4285. Did you ever hear of any? No.
4286. You say you also worked on the middle seam? Yes.
4287. Have you ever seen any gas there? Yes, a little.
4288. Whereabouts did you see it there? About half way down the dip—where they are working now.
4289. Did you see it often? No.
4290. How often did you see it? Once. I used always to have a safety lamp down there. We came to a place which was hermetically sealed, and as we were coming to a rather soft place, and were likely to get into a hole, I went to examine the hole with a safety lamp, but there was no gas found there. When we got through there was a little bit in the loose shale.
4291. Was it only a small quantity? Yes; the place had been stopped for three or four years, and the gas was in the old workings where no air whatever travelled.
4292. *By Mr. Glassey:* How long ago was that? Two years ago.
4293. *By the Chairman:* Did you work on the top seam at all? No.
4294. How long have you worked in the Haighmore Colliery? Eighteen months.
4295. Have you ever seen gas there? No, none whatever.
4296. Have you ever heard of any gas being seen there? No.
4297. Have you seen any black damp there? No, the workings are not very far extended; it is only a new colliery.
4298. Did you ever see any black damp in the bottom seam at Waterstown? Well, I believe there was a little in the same room as the gas was.
4299. Have you ever seen any there? No.
4300. Then, you do not know of any being there? No.
4301. Have you ever worked in any other collieries in the Ipswich district? Yes; a good many years ago at the Borehole, down at Bundanba.
4302. What depth were they down there? About 300 yards, as near as I can say.
4303. That is down a tunnel? Yes.
4304. Were the workings extensive there? No, not very extensive.
4305. Did you ever see any fire damp there? No.
4306. Nor black damp? No, I never saw any there.
4307. Were any of the collieries you worked in in Illawarra and Newcastle what you would call fiery mines? Yes.
4308. How long were you working there? About two years at the old Bulli.
4309. Is that where the explosion was? Yes.
4310. Were you working there before or after the explosion? After the explosion. They worked with safety lamps when I was there.
4311. So that you have had a fair experience of gas? Yes.
4312. Has the ventilation been fairly good in the two mines you have worked in in the Ipswich district, the Waterstown and Haighmore collieries? Yes, fairly good, barring the bottom seam in the Waterstown mine where the explosion occurred; and another two days there would have made that all right, because the place was only about 11 or 12 feet from being through. I believe I could have put it through in two days.
4313. Have you ever had any complaint to make in regard to the ventilation in either of those mines? No.
4314. Do you know if the mines are examined by any officer in the morning before the men enter? Yes. I used to go round with a safety lamp to every place in that new shaft after the accident.
4315. Did you go round with a naked light before that? No, I did not go round at all before that.
4316. Previous to the accident did somebody else go round and examine the working places? Yes.
4317. Was that done both before the explosion and afterwards? Yes.
4318. *By Mr. Glassey:* With a safety lamp? Yes, I went round with a safety lamp after the explosion, and Mr. Ferrier did so before that.
4319. *By the Chairman:* Mr. Ferrier was in the habit of going round before the accident occurred? Yes.
4320. You say you saw gas on one occasion in the present seam? Yes.
4321. While you were working in that seam, were the workings examined in the morning before the men went down? Yes.
4322. I am speaking of the middle seam. While you were working there, were the workings examined in the morning before the men went down? Yes.
4323. Who did that? Mr. Ferrier.
4324. Did he use a safety lamp? I cannot say whether he did in that seam or not.
4325. *By Mr. Glassey:* You worked in North Yorkshire? Yes.
4326. Where was that? In Giers and Mills's mine in Cleveland.
4327. That is near Gisborough? Yes.
4328. Did you work in any other mine there? No; I was working in one mine for eleven years.
4329. Was there any explosive gas in the mine in which you worked? Yes; although I was working in ironstone, there was gas.

4330. When you left North Yorkshire, did you come straight here? No; I came to Sydney, and from there on here.
4331. This is the first place you worked in after leaving the old country? Yes; in Bundanba.
4332. Have you worked in all the seams in Waterstown? Not in the upper one.
4333. But you have discovered gas in both of the seams in which you have worked? Yes.
4334. In the seam in which you are now working you only discovered gas on one occasion? Yes; it was a very small quantity, and you could not detect it even with a safety lamp.
4335. But in the seam where the explosion occurred, did you see it frequently? No.
4336. How often did you see it? Only once—a small blow.
4337. Did you hear the other men say that they had seen it frequently? No, I cannot say that I did.
4338. How long did you continue to work in that seam? About three weeks after the accident, and seven weeks before it. I was making this cut through to make communication for the air.
4339. You never had a similar experience as far as that seam was concerned? Yes.
4340. How long after you worked in the present seam? Five years.
4341. Have you heard the men working in the present seam complain of having discovered explosive gas? No.
4342. From your knowledge of gas do you think it is a proper thing to at any time examine a mine where gas has been seen with naked lights? Well, in the top seam I do not think it is necessary to use a safety lamp, as gas has only been seen in the old gob.
4343. But, speaking from your knowledge as a practical miner, do you think, after gas has been seen in a mine, it is a proper thing to examine that mine in the morning with a naked light? I hardly know how to answer that. I hardly think it is necessary to use a safety lamp. I believe in a man going round, but not with a safety lamp.
4344. Suppose you go along with a naked light, and discover gas, it is not difficult to say what the result is likely to be? Oh, no.
4345. Then do you think it is a wise thing to allow an accident to happen in that way?—Is it a wise thing to run such risks? Of course that is for the manager to say. He is very slow if he cannot use his discretion. Mind, if there had been much gas in the old gobs I should say it was not wise to use naked lights. I consider the underground manager or fireman ought to go round the old workings at a satisfactory distance, and make a thorough examination.
4346. Would you recommend that he should go round with a safety lamp? Yes, in the old workings.
4347. Do you think it is prudent to go round with a naked light in the workings where the men are engaged? When there is good ventilation.
4348. But assuming that the ventilation is not at all times good—it varies sometimes? It only varies a little.
4349. And you think it is not necessary to examine the places in the morning with a safety lamp—is that your opinion? In a case like that, that is my opinion.
4350. But when you had seen a little gas, might you not some day see a great deal more? Yes, when you go into the old workings. I think in the main air ways the use of safety lamps is unnecessary.
4351. But are you not always liable to strike a vein, or is there not likely to be a break in the floor from which gas would come? It would take a lot of gas to cause an explosion where there is a good lot of air travelling.
4352. Have you ever read of mines which have been worked for years without gas being discovered, and of considerable quantities of gas being found in them which had accumulated suddenly? Yes, I have heard of that.
4353. Now, in order to prevent accidents, is it not much better to use precautions and examine these places with a safety lamp whether gas has been seen or not? I should think it is quite necessary if gas has been seen.
4354. You have had considerable experience of gas in the old country, at Bulli, and to some extent here. I therefore want you to put your opinion on record whether you think it is a proper or prudent thing to always examine the places in the morning with the aid of a safety lamp, or do you think that a naked light would serve all purposes? I think in the case of the bottom seam, such as I have spoken of, it is necessary to go along in the morning with a safety lamp, because you can hear the gas giving off a little, though you cannot see it.
4355. And it is only in cases where you actually hear blowers that you recommend examination with a safety lamp? No. If I found any quantity of gas in a seam, I should consider a safety lamp necessary.
4356. In the present seam in which you are working, you do not think it necessary to examine with a safety lamp? I should hardly think it necessary.
4357. During the time you were fireman, were you then holding the position of underground overman? No.
4358. You worked at the coal afterwards? Yes.
4359. Did you make any entries in a report book? No. I reported to Mr. Johnson if all was clear.
4360. You had no report book of your own? No.
4361. How long did you continue at that work? Several weeks; it was not for long.
4362. The ventilation, generally speaking, has been fairly good? Yes.
4363. And in the mine in which you are now working, have you ever discovered gas? No.
4364. And have never heard of any? Never heard of any.
4365. *By Mr. Fryar:* Was it you who went down to that lower seam with me on one occasion after it had stopped working? No, I think it was Mr. Johnson.
4366. *By Mr. Rankin:* In a mine such as that in which you are now working, do you consider it necessary to examine in the morning with a safety lamp? Yes.
4367. And in mines where gas has not been seen, do you think there should be a discretionary power left with the manager? Yes, in cases where gas has never been seen.
4368. That is, in cases where gas has not been seen in any large quantity? Yes.
4369. But would you want the place examined with a safety lamp if any quantity of gas had been seen on different occasions? Yes, I consider that such places where the accident occurred should be examined with a safety lamp.

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4370. In all your experience of fire damp have you ever known it and black damp to be seen together? I have.
4371. *By Mr. Glassey:* You have seen both in the same room? Yes, I have gone into the room with a safety lamp, and if I put it on the floor where the black damp would be, the lamp would die out.
4372. *By Mr. Fryar:* You say actually that the lamp has died out? Yes, and as I lifted the lamp up again, the flame would increase in size, and when I put it further up again, there has been a slight explosion inside the lamp.
4373. *By Mr. Rankin:* Have you yourself ever felt any effects from black damp in cases of that kind? Yes, I have.
4374. *By Mr. Glassey:* When the light in the lamp died out, was it in consequence of black damp? I should consider so myself.
4375. You actually know, of your own knowledge, that it was black damp? Yes.
4376. What thickness would that black damp be—what distance would it be from the floor? About a foot.
4377. Could the ventilation not reach that? Yes, if it was strong enough.
4378. When there was sufficient ventilation to enable you to discover gas in your Davy lamp at the roof, don't you think there was abundance of air to clear out the black damp from the floor? No; I think it would take a larger quantity of air to clear out black damp than to clear out gas.
4379. You would not get an explosion unless you had a considerable quantity of air mixed with the gas? No; the gas would not explode without the air.
4380. And you think there was a sufficient quantity of air to clear out the gas, but not to clear out the black damp? Yes, I think so.
4381. You say there was a space between the 1 foot of black damp and the place higher up, where the gas was discovered? Yes.
4382. I cannot understand why there was not sufficient air to clear that black damp off the floor? My experience is that it takes a large quantity of air to clear black damp away. When I was a boy of twelve years of age, in the old country, I used to notice that if you put your lamp down too low in places, in order to sprag your wagon, your lamp was put out. There was fairly good ventilation, but not sufficient to carry the black damp away.

MICHAEL JEFFREY, manager of the New Chum Colliery, Dinmore, examined:

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4383. *By the Chairman:* Are you the manager of the New Chum Colliery? Yes.
4384. How long have you been manager there? Eleven years.
4385. Where were you previous to that? I was a workman.
4386. At the same colliery? Yes, the same colliery.
4387. How long have you been in New Chum Colliery altogether? Nearly twenty-eight years.
4388. Had you any experience of coal-mining previous to that? Yes.
4389. Where? In Scotland. I was about twenty-five years of age when I came out here, and I was in the mines from the time I was nine years old.
4390. What mines were you in in Scotland? I was in John Cross's, of Roughrig.
4391. Were you in any other mines? Yes; I was mining at Limerig, Slamannan, about 8 miles out of Airdray.
4392. Anywhere else? Yes; I worked for Mr. Rankin, Forrestfield, and for about twelve months I was mining in the north of England.
4393. In Northumberland? Yes, but I forget the name of the place now.
4394. *By Mr. Fryar:* Was it Plashatt's? Yes. Those are all the places where I worked in my young life.
4395. *By the Chairman:* Were any of those mines in Scotland, or in the north of England, what you would call fiery mines? No; none of them was a fiery mine.
4396. Then, in the old country you had very little experience, if any, of gas? I had no experience whatever, with one exception, and that was in a place to the west of Roughrig.
4397. During the whole time you have been out here have you worked in the New Chum Colliery? Yes; I have worked for Mr. Gulland all that time, with the exception of twelve months, when I was over in New South Wales working at Brown's at Minmi.
4398. Have you seen any gas in the New Chum Mine during the time you have been there? No; none of the light gas.
4399. Have you seen any explosive gas or fire damp there? No.
4400. Not at any time? Not at any time.
4401. Have you heard of any of the men working there having seen gas? No; the only little bit of an explosion we have had there was connected with a gob fire in No. 1 shaft at the New Chum, and that would not be carbureted hydrogen either. The gas was coming off from the gob fire.
4402. Have you ever seen any fire damp coming off from the coal? No, never.
4403. During the eleven years you have been manager at the New Chum have any of the men ever reported to you the occurrence of gas? No.
4404. Nor to the overman or fireman under you? No, they have never reported any gas.
4405. Is the mine examined every morning before the men enter? Yes.
4406. By whom is it examined? By the underground overman and roadsman. There are four of those on the staff—two for the shaft and two for the tunnel.
4407. Do they enter their reports in a book? Yes; the books are here. [*Books produced.*]
4408. Have they never reported in those books the occurrence of gas? Never.
4409. Where are the men while the overman or roadsman is examining the working places? They were on the top as a rule, but they asked for the liberty to go down to the engine plane until the overman came back and made his report. Some of the men stayed on the top all the time, and never went down until the overman came back, but others went down to the engine plane and remained there until the overman came back with his report.
4410. They were never allowed to go into the working places until after the receipt of a report that they were safe? No.

4411. What was used by the overman in examining these working places? A naked light.
4412. He never used a safety lamp? No.
4413. Do you think the safety lamp necessary? Not in that case.
4414. Why is that? There is nothing to examine.
4415. Why do you consider a safety lamp unnecessary? Because there had been no fire damp seen at any time.
4416. Do you have any black damp in the mine? Yes; it lodges in all the low-lying places when the air is weak.
4417. Have you ever had any accident from black-damp through suffocation? No.
4418. And how do you remove the black damp? By increasing the current of air.
4419. How do you produce the current of air in the New Chum Colliery? By furnace power.
4420. Where is the furnace situated? At the bottom of the shaft.
4421. The upcast shaft? The upcast shaft.
4422. What seam are you working in the New Chum Colliery? What is called the "New Chum" seam.
4423. What depth is that in the shaft? Two hundred and eighteen feet.
4424. What system of working have you there? Pillar and stall. Twenty-yard pillars are left on the side of the levels, and then there is a cut through driven through to a room on the upper side. On another 20 yards there is a heading.
4425. What is the size of the rooms? Eight-yard rooms.
4426. And what are the pillars? Twenty yards long, with the exception of a cut through, and 8 yards thick. The next pillars are 6 yards by 20 yards.
4427. But next to the level you leave 8 yards? Yes.
4428. Have you worked away the pillars much? No pillars at all have been worked away. Everything is intact.
4429. Have you good ventilation in the mine? Yes; I have never had any complaints about the ventilation.
4430. What is the thickness of your seam? Four and a-half feet.
4431. Are there any bands in it? No bands, but occasionally there is what might be called a boulder and bastard stone.
4432. In getting down the coal do you use explosives? No explosives are used. It comes down easily; it falls down, in fact.
4433. Never at any time you say have you seen or heard of fire damp? No.
4434. Have you a plan of the mine with you? No, it is in the office.
4435. How often do you have your plans made up? Every three months. On occasions there may be a survey made in between at some particular point, but a general survey is made every three months, and plotted on the plan.
4436. Has an examination of the mine been conducted every morning since you have been in charge? No, it took place from July of last year. Previously to that I examined it myself because there were gob fires going, and I never allowed a man down until I came up.
4437. Then the mine was examined every morning? Not by the underground manager.
4438. But has it been examined every morning by someone or other? Yes, ever since I have been there.
4439. There has been some officer whose duty it was to examine the mine? Yes, but on this particular occasion I would not depend upon anyone but myself.
4440. When the gob fires were going you examined the mine yourself? Yes.
4441. But it has always been examined by somebody? Yes.
4442. And the mine has not been at work for how long? For the last ten weeks.
4443. *By Mr. Rankin:* When you examined the mine yourself previous to appointing an officer to examine it, did you keep a report as to its condition? Yes.
4444. A report signed by yourself? I did not keep a daily report, but I did keep a weekly report.
4445. That is the usual weekly report as to everything being safe? Yes.
4446. You never knew of gas being seen by anyone in that mine? No.
4447. Neither at the time you examined it yourself nor since? No, except it was gas from the gob fires to which I have alluded.
4448. *By the Chairman:* That was not fire damp? No.
4449. It was carbonic oxide gas? Yes.
4450. *By Mr. Glassey:* The Slamannan mine in which you worked in the old country was not a fiery mine? No, I have seen explosive gas in one mine in which I worked which was owned by a man named Hunter. A little gas came out of the brushing. That is where I got my ears singed a bit by poking my head up into the brushing. It was just enough to frighten me.
4451. When did you leave the old country? In 1870.
4452. So that your knowledge of gas, generally speaking, is limited? Is theoretical only. I have not had much practical experience.
4453. Any knowledge you possess has been gained chiefly by reading? Exactly.
4454. Do you think, from the theoretical knowledge you have, that you would be able to detect gas quickly? I am not prepared to say whether I should detect it quickly or not. I want the practice.
4455. But from your reading, do you think you would have any difficulty in detecting it? I do not see that I would have any difficulty at all by following out the rules laid down for its detection.
4456. In assuming your position of manager eleven years ago, did you go through any practical or theoretical test as to your capabilities or competency? No, I did not.
4457. You do not hold any certificate of service or competency? No, I hold no certificate whatever.
4458. You have an underground overman? Yes.
4459. Who is he? He was my son William up to the strike.
4460. What age is he? Thirty.
4461. In appointing him to such a position is there any test that he, or any person holding the position, would be put through? I have not done so yet, but in the event of explosive gas being found I would have to have a man who had gone through a test.

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4462. That is to say, in the event of fire damp being seen, you would no longer keep the person you have now, but would get another person with some knowledge of fire damp? Exactly so.
4463. During your eleven years in the New Chum I understood you to say that you have never seen explosive gas? No.
4464. At the Minmi Mine, where you worked in New South Wales, did you ever see gas? No; I heard there was some, but I never saw it.
4465. While you were there you had no opportunity of seeing gas yourself? No, I had no opportunity of seeing it.
4466. I think you said you kept a plan of the mine? Yes.
4467. How long is it since you commenced to keep plans? Since I was made manager; and before that. Plans were in existence previous to that.
4468. And the workings of your mine are kept posted regularly every three months? Yes.
4469. How many men have you employed in the New Chum from time to time? The biggest lot I had was ninety-five.
4470. All in the one mine? Yes; that is in the new tunnel and shaft.
4471. Those are practically two mines? Yes, practically two mines on the same seam.
4472. How many men have you had at one time in the new tunnel, and in the shaft? It depends upon the number of places. At one time I had forty-five in the shaft, and latterly twenty-five. One time I had twenty in the new tunnel, and latterly I had fifty.
4473. At the time you had fifty men employed, were they scattered in different parts, or were they working pretty well concentrated? They were practically in three sections.
4474. Now, in each section how did you ventilate? By an air split.
4475. By means of regulators? Yes, we needed a regulator for the upper seam. The other split itself at the tunnel bottom, and went to the different levels, and round about the air shaft.
4476. So that you send air into the various sections in proportion to the number of men employed? Yes.
4477. And each section of men get a sufficient supply of fresh air for themselves? Quite so.
4478. In your reports do you record the number of cubic feet of fresh air you have circulating in the mine? No, I have never done that.
4479. Do you know the maximum number of feet you have ever had? No, I never had any test made of it.
4480. *By the Chairman:* Do you know the rate that the air is travelling through any place? No, I have never tested it.
4481. *By Mr. Glassey:* You don't keep an anemometer for that purpose? No.
4482. Your means of getting a current is by a furnace? Yes.
4483. Have you a furnace in both mines? No, there is no furnace in the tunnel—that is in communication with the shaft workings.
4484. You have communication between the shaft and the tunnel? Yes.
4485. And you don't keep a record of the number of cubic feet of air circulating in the mine? No, all that I look to is to see that the place is clear. If it is clear I know it is all right, and if it is not clear I know that the air is deficient.
4486. Have the men ever complained to you of a deficiency of air from time to time? No, they have never complained to me.
4487. During the period you have been manager have the men ever availed themselves of the provision in the Act which allows them to examine the mine from time to time? No.
4488. Have you any objection to the men examining the mine? No; why should I have any objection?
4489. I mean to say, would you demur to it? No, I should be only too glad if they would point out to me where there is a deficiency of air.
4490. Can you give the Commission any information as to why the men do not avail themselves of that very wise provision in the Act? Possibly they think there is no necessity to do so.
4491. Do you think that is the real cause? Yes, I do not know of any other cause; if they think there is any necessity they ought to avail themselves of the provision.
4492. *By Mr. Rankin:* Do you think they have every confidence in the management of the mine? Certainly; if the men have not confidence in the management, what would become of them?
4493. *By Mr. Glassey:* You say that during the time you examined the mine you never used a safety lamp? No, I never used a safety lamp.
4494. And the man who now examines the mine does not use a safety lamp? No.
4495. Have you a safety lamp about the mine? No; the last fire we had burnt the lamps all to pieces, and all the plans and all my books.
4496. Do you favour the examination of the mine in the morning with a safety lamp or with a naked light? As far as the mines I have been connected with are concerned, I see no reason to use a safety lamp in the morning examination or inspection.
4497. You consider that that mine is unfiery or ungassy? Yes.
4498. Supposing you or the overman were examining the mine to-morrow morning with a naked light, and there was gas there, don't you think that would be rather a serious matter? Well, he would just exactly walk into it.
4499. And an explosion would be likely to occur? Exactly.
4500. Do you think it is prudent to run such a risk? It might not be prudent; still I don't think it is necessary to use a safety lamp where gas has not been known to exist for the number of years I have been acquainted with this mine, and it is far easier to examine a place with a naked light than with a safety lamp.
4501. *By Mr. Rankin:* You think there is no risk in examining with a naked light? No, no risk.
4502. *By Mr. Glassey:* I suppose you are acquainted with the fact that mines have been worked for a far longer time than your mine has been without gas having been seen, and that when gas has been subsequently discovered serious results have followed? I have read of such a thing.

M. Jeffrey.
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4503. Is it wise then to run such a risk? I cannot say.
4504. You can give us your opinion as a manager? It would not be wise if gas has been detected, but I see no earthly use in insisting on the use of the safety lamp as long as there is no gas there to detect.
4505. So that you prefer going on in that way until gas has been discovered, and an explosion takes place? An explosion may not take place.
4506. But, presuming an explosion does take place, you would go on using a naked light in your examinations until that does occur—is that your opinion as a manager? I would not give my opinion in that way.
4507. Have you ever read of such things taking place? I have, but it is an exception, not the rule.
4508. *By the Chairman:* Do you think that a man using a safety lamp could examine working places for the causes of other accidents, such as badness of the roof, as well as he could with a naked light? It would take him a longer time, perhaps double the time.
4509. Do you think there would be a danger of other accidents occurring, from the badness of roof and so forth, if the examination was made with a safety lamp instead of with a naked light? It would have a tendency in that direction, because the man would be travelling in semi-darkness all the time.
4510. *By Mr. Glassey:* In the event of an accident occurring at your mine have you any appliances, such as splints and bandages, at the mine? Yes.
4511. You keep a supply of them? Yes, I have sticking-plaster, lint, mackintosh, splints, and bandages.
4512. Have you any oils for burns? No, I have no fine oils.
4513. Supposing you had an accident from a gob fire sufficient to burn a man, have you any appliances to meet such a case? Yes, I have picric acid in stock.
4514. Do you leave any slack in the mine? No, not much now, it is all taken out.
4515. Have you had any gob fires since you commenced taking out the slack? No.
4516. And your ventilation is better, of course? Yes, there are more brattices used.
4517. Are your brattices canvas or boards? Canvas.
4518. Have you any fixed distance that you keep the brattices from the face? No, we just brattice up the cut-throughs, and after they are done we put a stopping in.
4519. Do I understand that you have *not* taken out the pillars? Yes.
4520. Are the pillars large? Eight yards by 20 yards.
4521. What is the size of your boards? Eight yards wide.
4522. So that you practically leave about one-third of your coal in? Yes, we leave all that.
4523. Is it your intention to take out those pillars? Most decidedly, when we have wrought up to our boundary; we won't leave all that coal in for some other body to get.
4524. *By Mr. Rankin:* I think I understood you to say that the fire you had seen in the old country was from the brushing? That is where it was located, but I do not know where it came from.
4525. What style of working were you on when you had that brushing? Long wall.
4526. And the fire damp was found in the brushing in long-wall working? Yes.
4527. It would not be in one of the close places? No; the close places had a fault; there was a 27-feet fault there.
4528. It was likely that gas would come off that fault? Very likely.
4529. Was it your opinion at the time that it came off there? I was too young at the time to form any opinion.
4530. Is it your opinion that there is no reason to examine such collieries as you have been in lately with a safety lamp in the morning? That is my opinion at present.
4531. You consider that it is quite sufficient to examine them with a naked light? Yes.
4532. *By Mr. Glassey:* Is that furnace kept continuously in blast? Yes, when we are working.
4533. Sundays included? Sundays included.
4534. You do not favour the idea of stopping the furnace on Saturday night and lighting it again on Monday morning? No; that weakens the air considerably, and allows gases to collect.
4535. You keep the furnace going all the year round, holidays and all? Yes, men come every Sunday and attend to the furnaces.
4536. *By the Chairman:* In your report-book the only mention of any kind of gas that I find is on 27th December 1899, when you say: "I again made a careful examination of all the workings in the shaft this morning and found them all safe. There was a little carbonic acid gas in one of the places, but it was speedily removed"? Yes, that is the only entry of the kind.
4537. *By Mr. Glassey:* Have you ever been troubled with white damp? I do not know it by that term.
4538. It does not put the light out, but it affects the lungs? In that case I would not be able to detect it.
4539. *By Mr. Fryar:* During the eleven years that you have been manager have you been in the same mine all the time? No, it is No. 3 shaft I am in now. I was at No. 1, and managed at No. 2 also.
4540. The remarks you have made apply to all the shafts so far as explosive gas is concerned? Yes, I have never seen any.
4541. *By Mr. Glassey:* Do you keep a barometer and thermometer at the mine? No.
4542. And you have no anemometer to test the current? No, I can test it with a little bit of smoke.
4543. *By Mr. Rankin:* By the speed it travels at? Yes.
4544. *By Mr. Fryar:* You got startled at one time here by an outburst of black damp? Yes.
4545. And wrote or wired to me about it? Yes, that was in connection with the gob fires.
4546. Have you any idea how that gas happened to come off in a body? As the result of a fall. The fires ate away the supports, and let down the roof.
4547. And the water had been pumped out below another room? Yes, we found that out afterwards, when we got the water far enough down, where the fall had taken place. It was the draining away of the water that let the roof down, and it forced everything before it. That was an anxious day for me, and I was glad to get the men out.
4548. *By Mr. Rankin:* And you consider it was the concussion of the fall that brought the black damp out? Yes.
4549. Did it do any damage? Oh, no. I was afraid of the men getting suffocated, and I had to get them out as speedily as possible.

(Ipswich.)

FRIDAY, 18 *MAY*, 1900.

PRESENT:

MR. RANDS | MR. GLASSEY, M.L.A.
MR. FRYAR | MR. RANKIN

MR. THOMAS.

MR. WILLIAM HENRY RANDS, CHAIRMAN.

LLEWELLYN DAVID LLEWELLYN, Assistant Inspector of Mines, examined:

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4550. *By the Chairman:* Are you manager of Dinmore Colliery? I have been up to this week.
4551. Up to what date? I am manager of Dinmore Colliery up to to-morrow, when my term expires.
4552. I believe you have been lately appointed Sub-Inspector of Mines? Assistant Inspector of Mines.
4553. How long have you been manager of Dinmore? Five and a-half years.
4554. And where were you before that? I came here from Western Australia. Previously I was manager of Aurramurra, South Gippsland.
4555. How long have you been connected with coal-mining altogether? Twenty-eight years.
4556. And part of that time in the old country? Up to eleven years ago.
4557. What part of the old country? South Wales.
4558. How long were you there? I was manager there for eight years, and previous to that I was surveyor and under manager.
4559. How long would that be in South Wales? Sixteen or seventeen years as manager and surveyor.
4560. I suppose in South Wales you had plenty of experience of gas? Yes.
4561. In Dinmore Colliery have you ever seen any gas? I have not. I have seen gas in a small bore-hole in the south-east corner of the boundary. There was a small blow.
4562. But not in the pit itself? No; never.
4563. Do you know what seam you struck in that borehole? I am under the impression that it is our present seam. I made inquiries, and the section is very much similar to our present seam.
4564. Did very much gas come off? No, not much. It burnt up for half or three-quarters of an hour one day and part of the next day.
4565. Since you have been manager, have you ever had any report from the men of gas having been seen? No.
4566. Then, so far as you know, no gas has been seen in Dinmore Colliery? None whatever.
4567. Has every encouragement been given to the men to report such occurrences? Yes.
4568. They would not be afraid of doing so? Not the slightest bit.
4569. That is the only mine you have examined or been connected with in the Ipswich District? Yes.
4570. Now, with reference to the examination of the workings, were they examined every morning before the men entered? Since the new Act came into operation.
4571. Not before? They were examined before, but not quite so early. Previous to the new Act a man used to go down a quarter of an hour before the miners; now he goes in very much earlier, and comes out and signs a book before the men go down.
4572. Who makes this examination? The fireman; the "deputy," he is called.
4573. Does he use a safety lamp? No.
4574. How often have you been in the habit of examining the mine? Well, I examine the whole of the mine—old and new workings—once a week; but I used to examine the places where the men were employed three or four times a week.
4575. You examined all the old workings? Yes.
4576. Did you make a weekly report in your book? I did.
4577. Have you those reports with you? I have. [*Report Books produced.*]
4578. Then, in a mine where no gas has been seen, do you think it is quite safe for a man to go along with a naked light, and make an examination? Well, unless gas has been seen, with a careful man there should be no danger whatever. If gas has been seen in a mine, it might be judicious for him to take a safety lamp.
4579. But I am speaking first of the case where no gas has been seen, such as at Dinmore. You think, then, it is perfectly safe to examine with a naked light? I think so if the man making the examination is a competent man.
4580. Suppose a case where a small quantity of gas has been seen from time to time, or even only once, would you think it necessary then that a safety lamp should be used? Well, I think so, especially in the particular part where gas had been seen, although if you have a competent man going around with a naked light he could very quickly detect whether gas is present.
4581. You think if you employed a competent man, even though gas had accumulated during the night, there need be no fear of accident? It would depend upon the quantity of gas. If there was only about 1 per cent. of gas it would hardly justify insistence upon a lamp being used round the whole workings, but if there was a blow of gas I should certainly recommend that a safety lamp be used.
4582. But I was speaking more of small quantities of gas? I should feel disposed to recommend that a safety lamp be used.
4583. *By Mr. Glassey:* In all cases? Where gas had been discerned.
4584. But where gas had not been discerned? I hardly think that if you had a competent man who understood gas, and who had had experience of it, that it would be dangerous to use a naked light.
4585. *By Mr. Rankin:* But in a mine where there were very extensive and isolated districts, and a little gas was seen in one of those districts, is it your opinion that it would be necessary to go round the whole of the districts with a safety lamp? Well, if you found gas in one part, and that an isolated part, it would not be necessary. In that particular part I should examine with a lamp. On the other hand, if gas is seen in one particular part of a district there is no reason why it should not show itself in another part. If you take precautions in one part, it would be as well to take precautions in another part.

4586. *By the Chairman:* But a competent man ought to be able to discover gas? Yes, a very small proportion, say 1 per cent., which could hardly be detected.
4587. Is there any chance that owing to the very small light given by a safety lamp other dangers, such as unsafe roofs, would be overlooked? The roof, of course, can be examined far better with a naked light than with a safety lamp.
4588. Might there not, therefore, be some danger of accidents occurring now and again by reason of the roof not having been properly examined with a safety lamp?—I am speaking of mines where only a minute quantity of gas had been seen? I presume you refer to morning inspections.
4589. Yes? As far as this district is concerned I do not think there is the slightest fear of the roof giving much trouble. If gas has been found, it is just as well to take safety lamps. I should use safety lamps, I think, right throughout the pit until the gas had become diluted.
4590. But what I mean is would you always use a safety lamp for conducting examinations, though gas had not been seen in the mine for, say, two or three years? No, I do not think so.
4591. Would you make the use of a lamp compulsory simply because gas had been seen once or twice? No.
4592. Would the mere fact that gas had been seen in small quantities in the mine necessitate the use always of safety lamps when making examinations? No.
4593. Would you prefer, so far as the examination of the mine is concerned, that the use of safety lamps should be left to the judgment of the manager, or, on the other hand, that a law should be passed providing that when gas had once been seen safety lamps should always be used? I should recommend that safety lamps should be used in all cases if you refer to the whole colony.
4594. That is not the question. The question is whether you would like to see a law passed providing that where gas had once been seen it should be compulsory to use safety lamps during the morning examination of the mine? Yes, I think I would.
4595. Even though, as you say, there may be only 1 per cent. of gas? You are speaking of gassy mines. I think if men use safety lamps in conducting examinations they can do the work quite as effectively after they become used to them. If a mine has been free from gas for three months I believe it would be perfectly safe to go round with a naked light.
4596. *By Mr. Rankin:* I think I would make it nine months after gas had been seen? Well, that is a matter of opinion.
4597. *By the Chairman:* You have told us that you got gas in a bore hole put down on what you believe to be the same seam that you are working? Yes; that bore was about a mile away from the pit. I simply went by the section. I may be wrong, but it may be that it is the Tivoli seam. I know for a fact that the section is more like our present seam than anything I have seen in the district.
4598. You are inclined to believe that it is the same seam? Up to the present, as far as we have gone with the bore.
4599. Gas having been seen in a seam which is possibly the same seam, do you think that on that account safety lamps should be used in the colliery? No; I have never seen the slightest sign of gas in the Dinmore Colliery itself.
4600. What seam are you working? It is commonly called the New Chum seam.
4601. Have you much black damp in the mine at Dinmore? No, I have never seen any in the working part; but some little time ago I wanted to see some of the under workings where there is no air travelling through, and there I found a little black damp. I am speaking of the old level some 120 feet below where we are working at the present time. But in the working places I have never seen any black damp.
4602. What is the average thickness of the seam? The top coal is 4 feet 7 inches to 4 feet 8 inches; then we have some bands and shale from 15 to 18 inches thick, and below that we have another seam 3 feet 6 inches to 3 feet 8 inches thick.
4603. What is your system of working? Pillar and stall.
4604. What size are the pillars and stalls? The pillars are 6 yards and the stalls 7 yards.
4605. What is the length? Between the headings about 50 or 60 yards, with a cut-through between.
4606. *By Mr. Glassey:* A narrow cut-through? Six feet wide.
4607. *By the Chairman:* Is that the only seam worked in the Dinmore Colliery at the present time? It is the only seam in the lower part that is being worked now in the Dinmore pit.
4608. Have you a furnace for ventilation? Yes.
4609. Have you tried at all what amount of air passes through? Yes, I tried it last week.
4610. What did you try it with? I tried it in the old primitive way of walking with the air, or dropping a line, and I measured it as 8,700 feet per minute. We have no anemometer at the pit.
4611. *By Mr. Glassey:* You measured it by the travelling smoke? Yes.
4612. *By the Chairman:* Have you ever received any complaints as to the ventilation of the pit? I have not.
4613. Has the ventilation generally been good? Yes.
4614. In what collieries were you working in South Wales? I was manager of the Abergorkie Colliery, and the Rhondda Valley Colliery in South Wales.
4615. Were safety lamps in general use in those collieries? Yes.
4616. In all the working places? There is not a naked light throughout the pit, except one at the pit bottom.
4617. *By Mr. Glassey:* There is no naked light in the workings? No. All lights were examined before they went down the pit, and after they went down.
4618. How many men were then employed there? 1,100 men and boys.
4619. *By Mr. Bryar:* Was that bore hole you referred to in the mine? No, it was a mile from the mine, on the surface.
4620. What is the depth of the bore hole? 110 feet.
4621. Did you pass through any coal seams before that? No.
4622. And you were in coal when you got the gas? Yes.
4623. *By Mr. Thomas:* Is that below the present working? It should not be; it should be very much higher, but we know that there are faults intervening. There are several faults between our present workings and where I am speaking of. Of course, it may not be the same seam at all. Below we had

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4 feet 7 inches of coal, and below that we had coal and bands for about 10 feet or 12 feet, and I am unable to find out whether they have such a section in any other seam in West Moreton, except the New Chum seam. That is the only reason I had for expressing the opinion that it might be our present seam.

4624. *By Mr. Fryar:* Have you been conversant with any mines in Queensland or elsewhere, apart from the one you are working in now, where naked lights are used? I have been down other mines, but I have not been connected with them.

4625. I thought you said you were connected with one in Victoria? Yes; both in Victoria and New South Wales. I was in the Lithgow Valley Colliery in New South Wales.

4626. Were they all naked lights that were used in those places? Yes.

4627. What was the custom in those places in the examination of the mine in the morning? Similar to what it is here. A man would go round in the morning, and if gas had been seen, or there was a suspicion of gas existing in the mine, he would take a safety lamp with him to make the examination.

4628. Is it the general custom to use a safety lamp? No.

4629. Is there any place in Wales where you know that naked lights were used? Yes.

4630. All naked lights on the face? All naked lights on the face on shallow seams, on what they call house-coal seams.

4631. Was gas usually seen there? Occasionally, not usually.

4632. And yet they worked with naked lights? Yes; but they examined the places with locked safety lamps.

4633. And the ventilation was sufficient to clear off the gas? Yes.

4634. *By Mr. Thomas:* What we wish to know is whether you are of opinion that the Commission should recommend that a law be passed making it compulsory to use safety lamps in the examination of a mine, whether gas has been seen there or not? As I said before, in a mine where gas has not been found I do not think it is necessary to use a safety lamp.

4635. In such a case it would not be wise for us to recommend that that should be done? I think the present Act is quite clear on that subject.

4636. *By Mr. Rankin:* You think the present Act is quite good enough as far as that is concerned? Yes.

4637. *By Mr. Glassey:* I think the Act is very defective on that point? The Act may be defective on several points; indeed, I could point out some things which, in my opinion, are defects in the Act, but on that particular point it is certainly an improvement on the old Act. I think it would be rather a hardship to insist on locked safety lamps being used in mines where gas has not been seen.

4638. Do you mean in examining the mine in the morning? Yes. For my own part I would just as soon examine a mine with a locked safety lamp as I would with a naked light.

4639. Where would the hardship come in? You could not examine the roof so well with a safety lamp as with a naked light, and it would take a longer time to make the examination with a safety lamp.

4640. Suppose gas was only seen in a limited quantity, would an examination with the Clanny lamp be sufficient? Yes.

4641. And it would be much easier to make an examination with a Clanny lamp than with a Davy lamp? Yes.

4642. Where is the hardship, then, in compelling examinations to be made with a safety lamp? I do not see much hardship, but the man whom I have had as deputy, has had very little experience outside Queensland, and has probably never used a safety lamp in his life, and probably 80 per cent. of the men are in a similar position.

4643. But the hardship to the man examining the mine is not to be compared with the safety of the men? No, but I do not think it is absolutely necessary that the safety lamp should be used, unless gas has been found in the mine within a certain time before the examination.

4644. Do you know, or have you read, of any coal in the world that is absolutely free from gas? I know that in Wales all the coal gives off gas, but there is coal in the Midland districts of England and in Newcastle-on-Tyne, which has never been known to give off gas. I do not know where Camerton is, but an explosion took place there in November, 1893, and killed two men. Gas had never been known in that pit, still an explosion took place, which does away with the theory that it is impossible for an explosion to take place without gas. That explosion took place through a shot being fired and igniting the dust.

4645. *By Mr. Fryar:* How does that do away with the theory that it is impossible for an explosion to take place without gas? Professor Shaw tried an experiment with a hydrogen lamp, which would detect ½ per cent. of gas, and Mr. Hall, one of Her Majesty's Inspectors of Mines, made an experiment in 1893, and they both found that an explosion could occur without the presence of gas.

4646. *By Mr. Glassey:* I think that theory is pretty well exploded now? I can give you my authority for that.

4647. Mr. Dickinson, who is a very old inspector of mines in Great Britain, was asked with regard to that matter of non-fiery pits, and he says it would be very difficult to draw the line—that there is no such thing in existence as a non-fiery pit. He says, "It is very unsafe to say when a mine is free from fire damp"? That is, at the time he spoke of. I was present at a coal-test experiment carried out by Mr. William Galloway, and he says it will require 1 per cent. of gas to explode. Professor Abel says 2½ per cent., and yet before the Camerton (Radstock series of seams) explosion no gas had been seen any more than in the Dinmore pit, yet an explosion took place through a sudden outshoot.

4648. In his evidence before the Royal Commission on the 31st March, 1879, Mr. Dickinson cites certain instances where gas had not been seen for 100 years, and he goes on to say, "Only last year there was an unfortunate manager who lost his life in Todmore Colliery, which was supposed to be a black-damp mine, and where no fire damp had been seen for years." He says, "He was examining the mine with a candle, and he was burnt to death." He also cites another case of a mine near Burnley, which for over 100 years had been free from fire damp, and yet when some men went to get a small supply of coal for a farmhouse the gas fired. Now, what I want to get at is whether it is wise to run these risks. Is it not proper to insist by law that the mine should be examined by a competent person every morning with a safety lamp? Well, I am not prepared to say that that should be done in all cases.

4649. You say if a careful man examined a mine with a naked light he could discern gas? Yes.

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4650. Supposing he left the mine at night in perfect safety, and that gas was given off during the night, is it not probable that there would be an accident when examining it next morning? A competent man would know whether any change had taken place in the atmospheric pressure, and if he looked at his barometer he would know what precautions to take.

4651. But supposing you have such a case as that which I quote of a manager who examined the mine with a naked light and lost his life? He deserved to lose his life. Of course we do not know the conditions of that particular case. Recent experiments have upset some of the old theories. When I left home it had been decided that no explosion could occur without 1 per cent. of gas, and yet we have the Camerton explosion, which occurred in a place where no gas had ever been seen.

4652. Suppose gas accumulated during the night, what value would the competency of a man be if an explosion occurred next morning when an examination was being conducted with a naked light? I can only say that if a competent man went into a place, he could discern immediately whether any gas was there. In the first instance he would ascertain what air was going. He would follow the air. He would not think of examining the workings in the teeth of the air. He would take care that he had fresh air behind him, and he would be able to detect gas unless it was a very fiery mine.

4653. You qualify your statement by saying that the examiner should be competent, and also careful? Most decidedly.

4654. Is that the condition of things usually to be found in Queensland mines? Unfortunately not.

4655. That being the case, is it your opinion that under existing conditions as we find them, a mine should be examined with a safety lamp before the men go into the workings? If that were made the law it certainly would not add very much to the cost of the working, and it certainly would be a safe procedure, but I am not prepared to say that I am in favour of making it compulsory.

4656. I think you said that if gas had been seen during the previous three months in limited quantities, you would then suggest that a safety lamp ought to be used in conducting examinations? In that district—in that split of air.

4657. And not in the whole mine? And not in the whole mine.

4658. But I suppose you know that we have mines in the Ipswich district where there is no such thing as a split of air? I was not aware of that.

4659. We have that in evidence? It may be so in a new mine.

4659A. No, it is a mine that has been going for years. In that case what would your opinion be with regard to examination? If gas had been found I should recommend a safety lamp.

4660. Supposing no gas had been found? If you have a careful, competent man there should be no necessity for using a safety lamp.

4661. In that case you would leave it to the judgment of the manager, supposing a small quantity of gas had been seen? Yes.

4662. Supposing the manager himself was a man with little or no knowledge of gas, and his knowledge generally of the management of a mine was limited, what would you say then about the examination of the mine in the morning? I do not know, I am sure.

4663. *By Mr. Rankin:* You mean that if gas had been seen, the mine should be examined with a safety lamp? I say if gas has been found in a mine, in my opinion, that mine should be examined with a safety lamp—that particular district where the split of air goes wrong.

4664. *By Mr. Glassey:* But supposing there is no split of air, and the mine is not divided into sections? And no gas?

4665. And no gas? I do not see what risk there would be in examining with a naked light if no gas had been seen there. Certainly it is not advisable to have only one split in a large colliery, because the air must become very considerably vitiated before it reaches the last place.

4666. Do you think it is desirable, before men are appointed to the position of manager, that they should undergo some examination with regard to their fitness? I do.

4667. Whether in large or small mines? A man employing over ten persons underground should be a certificated manager with a certificate of competency or service.

4668. He should undergo some test with regard to his fitness? Yes.

4669. Would you recommend a board of examiners to be appointed for the colony? I would.

4670. And that board of examiners ought to show their fitness for the position before being appointed? Yes.

4671. In regard to the person who examines the mine—commonly called the underground overman—would you apply some test to him? A second-class test, the same as is provided by the present Act. While on that subject, I might mention another matter which is quite contrary to the English practice and law. A certificated manager in this colony can only manage one mine. I think if a man holds a first-class certificate of competency he should be allowed to manage more than one mine, provided he has certificated men under him. I have known cases in Wales of six mines employing over 1,000 men each being managed by one man, but he has certificated men under him, and he goes round each pit every week.

4672. I do not agree with the system of confining a man to the management of one mine only, provided he has competent men under him? Yes, it is a common thing all over the old country for a man to manage several mines.

4673. So that you would apply some test to the man who is in charge of the examination of the mine every morning? I would. I do not say I would go the length of having him up before the Board of Examiners, but I think an inspector of mines and one or two other competent persons would be able to ascertain whether he was a competent man or not. He should not be an illiterate man.

4674. But where the lives and limbs of men are in charge of one of their fellows he should be a competent man? Most certainly.

4675. Do you keep a record of your air current regularly? No, I measure it regularly, but I have not kept a record of it.

4676. You have a barometer and thermometer at your mine? Yes.

4677. Have you taken out any pillars at your mine? Very few.

4678. Speaking from your very extensive knowledge of mining and of gas, would you recommend that safety lamps be used in taking out pillars alongside waste where gas had been seen in the workings prior to the pillars being taken out? Well, there are different systems of working pillars. I believe in

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Jenkin's system. In Wales we never take pillars out. Nearly the whole of the pits are worked on the long-wall system, but we take pillars out occasionally. If I had to take a pillar out I would certainly see that I had a brattice cloth to convey the air there.

4679. In taking out a range of pillars alongside old workings where there are extensive excavations, and where falls have taken place, and cavities or crevices have been created and where gas is likely to accumulate, do you think it is wise to take out those pillars with safety lamps? Yes, where gas has been seen I would strongly recommend that.

4680. Have you a supply of bandages, splints, and stretchers at your mine for use in cases of accident? Yes, and carbolic oil.

4681. And medical comforts? Yes.

4682. Have you any fund at your mine from which a man, in case of accident, may receive so much per week, or from which, in the case of death by accident in the mine, the dependents of a miner may be paid a certain amount? We have not. There was a suggestion made about five years ago that the men should insure themselves, and I canvassed the pit for that purpose, but I found that there was considerable opposition to the proposal. Most of the men belong to friendly societies, and did not favour the suggestion, and it was not pressed.

4683. Would you favour the idea of employers contributing so much to such a fund, which might be afterwards subsidised by the men themselves? That is done at home, but whether there is a sufficient margin of profit on the coal in this colony for the employers to do it, I do not know. In Wales the employers contribute a certain amount.

4684. *By the Chairman:* Do the men contribute? Yes.

4685. Not the employers alone? No.

4686. *By Mr. Glassey:* Do you think ½d. per ton would be an oppressive amount? No, I don't think so; I think it would be a very good policy if the men and masters were to do that.

4687. *By Mr. Rankin:* You mean that ½d. per ton should be paid by the employer, and ½d. per ton by the miner? It would depend upon what the proposal was; I do not think it would be right to ask the proprietors to pay as much as the men, because it is really the men who would get the benefit from such a fund—the masters would get no benefit whatever from it.

4688. *By Mr. Glassey:* Would not the employers benefit very considerably in that claims for compensation would be met from that fund rather than settled by law? I question very much whether it would save law cases.

4689. I think it is a well-established fact that where such a system prevails litigation is a thing almost unknown? I know that there has been a great strike in Wales over the same question.

4690. That is the law in New Zealand? Yes.

4691. And there litigation is almost unknown? Litigation will be brought about through negligence on the part of the manager or the proprietor, but it does not follow that every accident that takes place in a mine comes under that head.

4692. Oh, no; but my object in wishing to see such a fund established is to afford some assistance to the dependents of men who may lose their lives through an accident? If the men were to contribute a certain amount, I believe the employers would be willing to follow; I am sure that my company would be, but really, considering the number of men employed about the mines, it is remarkable how few accidents there have been; there has been a remarkable immunity from accident in this district.

4693. *By Mr. Fryar:* Touching this question of the examination of a mine with a safety lamp, supposing it was made law that all places in a mine must be examined with a locked safety lamp before anyone went down, what would be the result? As far as the detection of gas is concerned, it might be better to do that, but, as I said before, I do not think a man would be able to examine the roof so well with a safety lamp as he would with a naked light.

4694. We have it in evidence that a place was examined a quarter of an hour before a certain accident occurred by which five men were killed? There must have been a sudden outburst of gas in that case.

4695. Then, if you examined the mine with a safety lamp in the morning and found it safe, is there any guarantee that there would not be an explosion of gas in a quarter of an hour after that, or even in a much shorter time? No, no guarantee at all.

4696. And would not the natural result of such a law with reference to safety lamps be that no naked lights would ever have to be taken into a mine? It is a remarkable thing to examine a place a quarter of an hour before an accident takes place, and not find gas; I can hardly understand it—there must have been a sudden outburst of gas.

4697. *By the Chairman:* Might there not be an outburst of gas in a minute through a man putting in a pick? Yes.

4698. *By Mr. Fryar:* Well, knowing that we have it in evidence that there was an explosion, by which five men were killed, within a quarter of an hour after the place had been examined, what is your opinion? There must have been a sudden outburst of gas, and a fall must have taken place to force the gas out on to the naked lights, but that may occur in any mine; it might occur in my mine to-morrow morning. I have had falls take place in that mine within ten minutes of the examination; it is quite possible that a sudden outburst of gas may take place within a quarter of an hour after the examination, but it is unusual.

4699. What would be the natural result? It may never happen again.

4700. But it has happened, and very recently? In that case if gas exists in a pit at all, and it is compulsory that the examination shall be made with a safety lamp, the miners would all have to use safety lamps.

4701. It has been suggested that gas exists in all pits? It has been suggested, but I do not quite follow the suggestion. I have never seen gas in the Dinmore Colliery, but of course there may be a certain percentage of gas in the mine.

4702. *By Mr. Rankin:* What Mr. Fryar wishes to know, I think, is, what would be the result of making it compulsory that all mines shall be examined with a safety lamp? You may examine the mine in the morning, or during the day, and a short time afterwards an outburst of gas may take place.

4703. *By Mr. Fryar:* What I want to get at is, would not the legitimate conclusion from such a prohibition be that all naked lights would be kept out of mines? Yes; probably it would.

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4704. Have you any idea of the total annual output of coal in the world? No; I have no idea. That is rather a big order. I know that the port of Cardiff, in Wales, has an output of 30,000,000 tons.
4705. Can you give us the output of Great Britain for the last year? I forget the exact figures.
4706. Or the output for any recent year, say the year before last? No; I forget the exact figures.
4707. Do you think that in England, during 1898, the output was over 200,000,000 tons? It would be very near that.
4708. Have you no information touching the progress of the coal trade during last year? I have seen the figures, but do not remember what the output was.
4709. You do not know that there was an increase of about 20,000,000 tons? An increase in the output, but a decrease in fatal accidents.
4710. Supposing the output was 220,000,000 tons last year, have you any idea of the proportion that output bears to the rest of the world? If I remember rightly, the United States run Great Britain very closely, if they do not exceed her output.
4711. Shall we say 500,000,000 tons for the whole world? Fully that.
4712. Do you know the output of coal in Queensland? Not for last year.
4713. Any year? I cannot be certain.
4714. Has it ever reached half-a-million tons? I should think so.
4715. It never has? I have seen the figures, but I forget them.
4716. I think we may safely say that the output of Queensland is one-thousandth part of the total world's output? Yes.
4717. Now, do you know any place on the face of the earth where it is the law that every place in a coal mine must be examined with a safety lamp before the men go to work? In South Wales it must.
4718. Must? Yes.
4719. But Wales is under the same law as England. Do you know any place on the face of the earth where it is the law that every place in a coal mine must be examined with a safety lamp before the men go to work? I believe that is in the English Act.
4720. Well, that is your evidence; it is not mine? You might have a copy of the law by you, but I think that is the law.
4721. While in Queensland you have possibly seen several mines where tunnels have been driven down to the coal—followed down from the outcrop. Would you have those places examined every morning with a safety lamp? Not necessarily.
4722. But if the law was such, that would have to be done? I do not recommend that the law should be such.
4723. I am not speaking of your recommendation; I am asking for your opinion? I do not think it would be necessary in the case of a tunnel. Of course there may be cases where even tunnels should be examined in that way, but there is far better ventilation in tunnels than in shafts.
4724. But if you are making a law on the subject, all places must be examined in the same way. It is a question of advising the making of a law which would be compulsory upon everybody? As I have said before, I am not prepared to say it would be wise to make it compulsory to examine all places with a safety lamp. It might be left a great deal to the discretion of the manager or the inspector.
4725. But if a law of that kind was passed, would it not be compulsory in driving tunnels also? Yes, of course.
4726. *By Mr. Glassey:* I understand you to say, in answer to Mr. Fryar, that the practical outcome of the examination of mines in the morning with a locked safety lamp would be that no naked lights would be used in a mine at all. How do you make that out? Well, as far as the danger is concerned, if you insist upon examination with a locked safety lamp, the mine might be perfectly safe when examined with a locked safety lamp, but immediately after an outburst of gas might take place.
4727. But are you not more liable to find gas in the morning after the pit has been idle all night? More liable, certainly.
4728. Then where is the connection between the examination with a locked lamp and the consequent necessary working with locked safety lamps? Of course there is more liability of gas accumulating during the night. In going round in the morning, if you have a competent man, he might tell if any change had taken place in the atmosphere. He uses precautions. He goes down with his naked light, and if any gas has been found in the pit he examines as he goes in. If gas has been found in any particular place, he takes a locked safety lamp. He then comes back and signs his book, and the men go down under the assumption that everything is perfectly safe.
4729. I have read about accidents occurring in the morning in a mine where gas has never been seen, and I have not read, nor do I know of an accident occurring suddenly during the day in mines where gas has never been discovered. It has been known for many years that men have lost their lives by examining mines in the morning with a naked light where gas has not been previously seen, and it is to prevent that danger that I think locked lamps should be used when the morning examination is being made? Then we come back to where I started. I say the man going round to examine should be a competent man, well versed in gas.
4730. *By Mr. Fryar:* How is your mine ventilated? By a furnace.
4731. Is it kept up during the night as well as during the day? There is not quite as much fire. The fire is banked during the night.
4732. And at the week's end the same? Yes, it is banked up on Saturday to last until Monday.
4733. Then how is it that more gas will be made during the night when there are no fresh pores being opened by the men? Of course you have not the pressure of air coming down during the night, and through taking the pressure away the gas might be released. The gas might not be released from the face itself, but there would be more likelihood of it escaping from the old workings.
4734. But how would the pressure be less in the night than during the day? There would not be the same fire to draw it.
4735. And for that very reason the pressure would be heavier, and not lighter? The current would not be so strong. I made a mistake. I am speaking of the current.
4736. Would it be a fact that while the furnace was going full power the pressure would really be lighter? Yes.

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4737. I want to know, therefore, how the exudation of gas would be greater during the night when the pressure was greater, and when no new pores were being opened, than during the day? Of course, the current would be lighter, and there would not be the same current of air going round. In a gassy mine the furnaces should never be allowed to go down.
4738. If gas was known to be given off, either during the day or night, it would be unwise to allow the furnace to go down during the night? Most decidedly.
4739. But even then, there is still the fact that no new pores are being opened during the night, while they are being opened during the day; so that I fail to see how more gas would accumulate during the night? Speaking from experience, I can say that gas accumulates more at night than during the day. In nine cases out of ten, if there are blowers, they come out during the night.
4740. You are conversant with the fatal accidents that have happened in Queensland from gas? Yes.
4741. Have any of those accidents occurred when the men went in in the morning? No, not one to my knowledge.
4742. I think it is well known that Mr. Keene was killed when the day was far advanced. Mr. Ferrier was killed after he had examined the place, and when he had gone back again about 10 o'clock. In all these cases the accidents did not occur at the time when the examination ought to have taken place—is that not so? Yes.
4743. In view of all these facts, would the examination of the place with a safety lamp in the morning be a safeguard, or, if followed to its natural conclusion, should we not have to debar the use of naked lights altogether in mines? Well, if you make it law that you must take a safety lamp in the morning for the examination of the mine, it will follow that the men must work with safety lamps.
4744. *By Mr. Glassey:* Where does the connection come in? The connection you have been quoting. You have it in evidence that a place was examined and found to be free from gas a quarter of an hour before an accident occurred. On that, what is the use of a locked safety lamp? The explosion took place a quarter of an hour afterwards.
4745. *By Mr. Rankin:* And we have the other accidents which took place later in the day after the examination? Yes.
4746. I think your opinion, as you have expressed it to the Commission, is that where gas has been seen, that place should be examined with a safety lamp for a certain period? Yes.
4747. And that afterwards it would depend upon the carefulness of the fireman? Yes.
4748. But where gas has never been seen you do not see any reason to make it compulsory that the mine should be examined with a safety lamp? That is so.
4749. *By Mr. Glassey:* You say that on Saturday you bank up the furnace, and that that lasts right up to Monday morning? It keeps the air warm, and keeps up a certain current.
4750. But it cannot create much of a current when it is like that? Oh, yes.
4751. Can it create a full current? Not a full current.
4752. How many hours is the pit standing? From 1 o'clock on Saturday till Monday morning. I send a man down on the Sunday; he goes down the ladder, and puts a fresh supply of coal on the furnace, and that lasts till Monday morning.
4753. So that, as a matter of fact, it is not left more than twenty-four hours? That is so.
4754. But during the day it will be frequently fired? Yes, three or four times during the day.
4755. And for twenty-four hours at the week end it gets no fresh supply of coal? No.
4756. In that case the fire must have much less force? The coal we use for that furnace is a very good coal for the purpose, and lasts a long time.

HENRY HARRIS, colliery manager, examined:

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4757. *By the Chairman:* Will you tell us what experience you have had in coal-mining? I have had about thirty-one years' experience in coal-mining.
4758. Will you state in what places you have had that experience, beginning at the first place? In South Wales.
4759. How long were you in South Wales? I left there in 1886.
4760. How long were you in the mines in South Wales? From 1868 to 1886.
4761. That is eighteen years? Yes.
4762. Where were you after that? I came out then to the Maryborough district in this colony.
4763. How long were you in the Burrum district? I have been there mostly since 1886. I came down here last September.
4764. That is about fourteen years in that district? Yes.
4765. Have you been connected with any mine in the Ipswich district? Yes.
4766. What was that? The Ebbw Vale Colliery.
4767. What position did you hold there? That of manager.
4768. How long were you manager there? About three months, when the mine was stopped as the result of a lawsuit.
4769. After that were you connected with any mine in this district? I am just starting at the Dinmore Colliery as manager.
4770. Then your experience of the Ipswich district is very small? Yes.
4771. While you were at Ebbw Vale as manager did you see any gas in that mine? No, none.
4772. Was any reported to you? No.
4773. What mines were you working in or connected with in the Burrum district? I worked in all the mines there—Torbanlea, Burrum, and Howard.
4774. Which did you work in when you first went there? The Howard Colliery.
4775. That is the Queensland Collieries Company's Mine? Yes.
4776. What position did you hold there? I was a miner.
4777. How long were you in that place? I could not tell you exactly, but it was only a few months.
4778. Did you ever see any gas in that mine while you were there? No; I never saw any gas in the Howard.
4779. On leaving the Queensland Collieries Company's Mine where did you go? I went prospecting for coal.

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4780. Near the surface? Yes.
4781. After leaving the Queensland Collieries Company's mine, what was the next mine you were connected with? Torbanlea.
4782. How long were you working there? I should say a couple of years, on and off.
4783. How long ago would that be? About 1887 and 1888.
4784. Which part of the Torbanlea mine were you working in? I worked in what is called the old shaft, and in the last shaft.
4785. Had they in 1888 gone through the stone drift where the fault was that threw the seam down? No; they had not come to that then.
4786. Then you would not know anything of the dip workings where the recent accident took place? No.
4787. Did you see any gas in Torbanlea? No; I never saw any there, but I heard of it being in the new shaft.
4788. Did you hear of any explosion taking place from it? Yes, but I was not working at Torbanlea then.
4789. Did you see any explosion while you were working there? No.
4790. Are those the only mines you worked in on the Burrum? I was at the Riverbank Colliery.
4791. Did you ever see any gas there? Yes; I saw gas in the present working shaft.
4792. Did you often see it? I should mention that I was in the Dudley before that; I was in the Dudley about 1889.
4793. How long were you there? Nearly a couple of years.
4794. Did you meet with any gas there? Yes.
4795. Was it in large quantities? No; not what I would call large quantities. It was there every day or two sufficient to keep a cap on the flame right to the return.
4796. Did you see it very often, or only on one or two occasions? It was there for some months.
4797. Did you see any gas in the Riverbank Colliery? Yes, in the level on the river side.
4798. Was that abandoned and closed off during your time? Not closed off, but it was just left for a time.
4799. Did you often see gas there? No; just about a couple of times.
4800. Was it in large quantities? No; just enough to detect it; it would explode in the lamp.
4801. How long is it since Ebbw Vale was closed? In December.
4802. What was their custom with reference to examining the mine in the morning—was it examined before the men entered the mine? Yes.
4803. And a report that it was safe was made before the men were allowed to enter? The report was made to me. I had two men going down in the morning.
4804. Then you would allow the men down on receiving the report? The report did not come to the surface—only to the bottom.
4805. But the men were not allowed away from the bottom until you received the report? They were not allowed into the workings.
4806. Was the examination made with a safety lamp? No; a naked light.
4807. Do you think there was any necessity to make it with a safety lamp? No; I do not think so.
4808. *By Mr. Fryar:* In what capacity were you at the Dudley? Manager.
4809. And at Riverbank? Manager.
4810. Those are the two places where you saw a little gas? Yes.
4811. Were there two shafts at the Dudley? Yes.
4812. Connected? Yes.
4813. Was the ventilation tolerable? Yes; pretty fair. I remember it was measured and found to be something over 3,000 feet.
4814. How many men had you? Speaking from memory, about twenty.
4815. Did you see much gas there, either in the morning or at any time during the day—enough to be seriously dangerous? No.
4816. Had you any explosion? No; not what I should call an explosion.
4817. *By Mr. Rankin:* Did any gas light? Oh, yes.
4818. *By Mr. Fryar:* You got a little bit occasionally? Yes.
4819. Any little bit of an explosion you had was when the men lit it either for amusement or experiment? Well, I lit it myself one morning; after testing with the safety lamp and finding no gas I opened the lamp, and a little gas lurking over a cap or lid was lit.
4820. There is a reason for asking that. We had evidence that there was an explosion there, and I got it out of one witness that it was only when they were amusing themselves with the gas. I wanted to know if you knew of any serious explosion? No, nothing of the kind.
4821. Was there so much gas that, with ordinary attention to ventilation, it would have been dangerous? Well, one time I had to do all I could in the matter of ventilation, because there were a couple of days when the light showed a cap right to the return, but it eased off.
4822. Eased off in the return? No, in general.
4823. That is, at the time you got past the workings the air was beginning to get foul? No, I could detect a small cap for a day or two nearly all round. It was only seen explosive in the main level.
4824. As soon as you came in contact with the working face—is that what you mean? Yes.
4825. And from there to the return you could observe gas? Yes.
4826. What means had you of ventilating the mine? Just a little furnace.
4827. If you had had any quantity of gas do you think 150 cubic feet per man per minute would have been fair and reasonable? No, if there had been much gas I should have wanted more air. I might want up to 500 feet.
4828. And you consider 150 feet ample for your requirements according to the gas you saw? Yes.
4829. Were any pillars taken out of that mine? Very few. I worked a portion of long wall, and there were very few pillars to take out.
4830. Did you examine the gob to see if any gas was accumulating? I never saw any gas in the Dudley, unless it was coming off the main level.

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4831. Was there any particular part of the seam where gas was found? No particular part.
4832. Not more in the bottom than in the top? No.
4833. Was there a small band in the middle of the coal? Yes.
4834. And you never noticed more in the bottom than the top? No, I have seen it all over the seam; also in the roof.
4835. If you anticipated danger, was there any difficulty in enlarging the furnace? No; it could easily be enlarged.
4836. At the Riverbank you were manager also? Yes.
4837. Was the gas you saw there in the new shaft? In the new shaft.
4838. Were you then connected with your other shaft? No.
4839. Was it far in from the shaft? I should say about 150 yards.
4840. Was it in the main level? In the main level.
4841. Were a pair of levels being driven and connected? No; just one.
4842. How did you get the ventilation into it? I had an airway on the lower side.
4843. How was it constructed; was it carried in by gob-stuff and waste? Yes.
4844. Was that all the way from the shaft—150 yards? Yes.
4845. That was the only means you had of taking in ventilation? Yes. I cut a portion of it off later on, when I could return it from the main level; I turned it on to this main airway again. When I got a connection along from the main level I cut a portion of it off, and drew it up to the main level and turned it in.
4846. That was another level, with a solid pillar of coal between? No; there were rooms off the level. They connected with another level.
4847. You say the level was 150 yards from the shaft; so you wholly depended upon the gob stuff being built up to the roof, and carrying the air in and coming back to the other side of the gobbing? No.
4848. Then, can you tell us how far it had to depend upon the gobbing for its ventilation? About forty or fifty yards.
4849. That is much further than the usual course in Queensland, is it not? Yes; I think it is rather far. Of course, I found it that way; it was not my own plan. I changed it as soon as I could.
4850. Was the gas standing there when you took possession? No; I didn't see it for some time. I was on the point of leaving when I first saw gas. I only just state the fact that I saw fire damp at the Burrum.
4851. How long were you there as manager? From March until the end of the year.
4852. What was the means of ventilation when you were not holed through to the second shaft? Just the exhaust steam from the pump.
4853. Were they holed into the second shaft before you left? Yes.
4854. Did that make any difference to the ventilation? Not much. It was not properly opened up.
4855. During the time that you were manager, did you consider the gas in that level dangerous? No.
4856. What course would you have adopted if more gas had come off? Of course, if there was more gas you would have to have more mechanical ventilation, or stop the level.
4857. Did you conduct all your examinations with a naked light? Yes.
4858. You had no safety lamps there at all? No safety lamps.
4859. Do you consider it safe to examine with a naked light? I do not consider it right to examine with a naked light when once gas has been seen.
4860. But you were not afraid? No, I was not a bit afraid of this gas, which was only in a small quantity.
4861. Did you examine the mine yourself? The underground manager examined it.
4862. Did he ever report to you that it was dangerous? No.
4863. Did he ever see any gas in the working places? Only in that level.
4864. That was going towards the river? Towards the river.
4865. *By Mr. Rankin:* What you are referring to is the present pit that is working? Yes.
4866. But you had a pit going before that under the Harris, Bowen, and Company? Yes.
4867. How long did you work that pit? From June, 1892, until the end of 1896.
4868. Did you ever find any gas in that? Not a particle.
4869. Did it ever occur to you that you would require to examine it with a safety lamp? Not there.
4870. *By Mr. Glassey:* You say that during the time you were managing at the Dudley the gas became a little troublesome? Yes.
4871. Have you any reason to assign as to why that sudden change took place? There is a band coming into the coal. Further back the coal was free of bands, but we afterwards came into a band in the seam, and this was approaching another trouble altogether, and I think that would have something to do with it.
4872. You think that that trouble a short distance ahead would have something to do with the sudden change in the extra quantity of gas? Yes, and the atmospheric pressure might have something to do with it, too.
4873. Is that level in the Burrum to which you allude the one we had evidence about as being now idle or standing? Probably it is standing, but I do not know that for a fact.
4874. Were you there when the level ceased to work? Yes, I stopped it.
4875. What was the cause of your stopping that level? It was getting into a bit of a band, which was very hard.
4876. Then it was in consequence of the poor quality of the coal that you stopped it? The coal was not up to the regular quality, but I left it because I could not get anyone to work it for the price I was giving at the time.
4877. It was not stopped in consequence of gas? No, not at all.
4878. *By Mr. Rankin:* Was there any anticipation that you were getting near enough to the river when you stopped that level? No.
4879. Do you know if that level has been driven any since you left it? No.

4880. *By Mr. Glassey:* Do I understand you to say that from the time you discovered gas in the Dudley mine, or the Burrum mine, you examined the mines in the morning with a naked light? Only as far as the Burrum is concerned, not the Dudley.
4881. How long did you continue to have the Dudley mine examined with a safety lamp? As long as it worked from the time of finding the gas.
4882. During the time you managed the Burrum mine was it examined with a safety lamp in the morning before the men entered? No.
4883. How many men had you employed there? There were only two or three on the river side where the gas was seen; but there were from twenty to thirty on the other side—the south side.
4884. You never saw gas on that side at all? No.
4885. Had you a fresh supply of air for each section of men where they were employed? A fresh supply for each side.
4886. In proportion to the number of men employed in each section? Yes; there were two splits, one for each side.
4887. I understood you to say that you have had considerable experience of gas? Yes, I have had a few years' experience.
4888. Do you hold a certificate of competency? Yes.
4889. When did you get that certificate? In January, 1886.
4890. From your experience as a manager, and from your knowledge of gas, do you consider that it was safe to examine the Burrum mine where gas had been discovered in the morning before the men entered with a naked light? Yes; it was such a trifle. There was only just sufficient gas to show that it was there, so that I did not consider that there was any danger whatever in examining the mine with a naked light.
4891. You had no idea of that trifle increasing; did you think it would remain at a trifle? I did not expect when it was working that it would increase.
4892. I want your opinion as to whether you think it desirable to have all mines, irrespective of whether gas has been found in them or not, examined with a safety lamp in the morning before the men enter? I have known several collieries in my district at home to work the same seam for twenty years, and never see a particle of gas, and I do not think it would be necessary to use the safety lamp in a case like that.
4893. Would there be a likelihood of gas being seen even the next morning, notwithstanding that the mine had worked for twenty years under those conditions? I cannot imagine it being found in that particular case.
4894. I am speaking of anywhere? Oh, we must admit the possibility of that anywhere.
4895. Is there any mine in Queensland which you would say was not likely to give off gas? No; from my experience I could not say that.
4896. That being so, is it perfectly safe to examine any mine in the morning with a naked light? If you are going in for the very safest thing, of course the safety lamp would be the safest, but as a rule fire damp will give a little caution before you test it with the safety lamp.
4897. Would you recommend that all mines should be examined in the morning by a competent person with a safety lamp? It would not be much trouble, but I should be rather inclined to say that it is not necessary in cases where gas has never been seen, or where there has been freedom from gas for a certain number of years—say two or three years.
4898. But can you say that there is not a likelihood of gas being seen? I cannot say that; I can only say there is a possibility of gas being seen.
4899. In order to avoid any danger so far as the men examining the mine in the morning are concerned, is it your opinion that there should be a change in the law in the direction I have indicated? Such a change might result in a greater danger, because a safety lamp does not give the same light as a naked lamp, and in using a safety lamp where it is not necessary the man examining a mine may not see other dangers that are actually there.
4900. In the event of a lamp being used, what lamp would you recommend—the Davy lamp? No, I think the Hipplewhite Gray lamp is the best for deputies and firemen. I have not had much experience of new lamps, but from reading the description of that lamp I am inclined to advocate its use.
4901. Does that give a good light? Yes.
4902. Supposing that particular lamp to which you refer, and which gives a good light, were introduced, would you recommend that the examination in the morning be made with that lamp? That lamp, as far as I can find out, would be the best lamp for the purpose, and it is the one I would recommend if it is to be compulsory that safety lamps are to be used in the examination of mines.
4903. *By the Chairman:* Have you had any experience of that lamp? No, no actual experience.
4904. Are you speaking from what you have read? From what I have heard and read, and from the description I have seen.
4905. You have not actually seen the lamp? No; it is recommended by the Royal Commission at home.
4906. *By Mr. Rankin:* Was that lamp recommended to be used where there was fire damp? Yes.
4907. *By the Chairman:* Not where there was no fire damp? No.
4908. *By Mr. Glassey:* You would not go so far as to recommend that all mines without exception should be examined with a safety lamp in the morning? No, I would not go that far.
4909. In the event of a small quantity of gas being seen in a mine, would you then recommend that it should be examined with a safety lamp? Yes, by all means.
4910. Supposing a small quantity of gas were seen in one section of a mine and not in another section, would you have all the sections of that mine examined with a safety lamp? Yes; it would be safer.
4911. Have you had any experience in the removal of pillars where gas existed? Yes.
4912. How long did you continue at that work? It is so long ago that I could not tell you exactly, but I should say a year or two, at any rate.
4913. Was that in what was considered a gassy mine? Yes, but not a real fiery mine; you could use a naked light in it.

H. Harris. 18 May, 1900.

4914. If in working a mine gas was discovered in the whole coal, in large or small quantities, and you were working the pillars in that mine, would you recommend that the men working furthest in should use safety lamps in taking out the pillars? If the quantity of gas in the first instance was small, and the gas had disappeared before starting the pillars, I do not see any necessity for using safety lamps.
4915. As you work away the pillars, and there are larger excavations, and a number of falls take place, would you then recommend that safety lamps be used in working near old workings? Yes, if gas has been seen.
4916. Would you recommend the use of the safety lamp in examining old workings? If they can be thoroughly examined I would not recommend it.
4917. Can excavations, crevices, and falls be thoroughly examined? Very often they cannot be thoroughly examined.
4918. Where they cannot be examined, and where you may have quantities of gas lodging, and where the concussion of other falls may force out that gas, would you have safety lamps used? I would endeavour to have a current going right through to the men working the pillars.
4919. But would you recommend the introduction of the safety lamp in the removal of pillars where gas has been seen in the whole coal? No; I think that would be too sweeping.
4920. You think there would be no necessity? No; I would like to make it clear that if there was any doubtful portion, and I could not turn the air except past the old workings, then I would use lamps.
4921. *By Mr. Rankin:* That is supposing the air had to go round the waste workings first? Yes, if it skirted the waste workings.
4922. *By Mr. Glassey:* During the time you have been manager, have you ever appointed a fireman or deputy to examine the mine? Yes; I appointed a man at the Dudley.
4923. Did you put him to any practical test? I did.
4924. What test? He was a man who had come from South Wales, and had been working in fiery mines like myself.
4925. But taking the colony as we know it, with a number of men who have had no experience of gas, would you put applicants for the position of fireman to some practical test? Yes, by all means. The manager should make sure that his fireman had some practical experience and skill before putting him in the position of underground overman.
4926. He should show his fitness by some examination before holding such a position? Yes.
4927. *By Mr. Thomas:* I suppose you would judge of a man's capability by your own knowledge and experience of him? Yes, that is the examination I mean.
4928. That would not be putting him through an examination, but you would judge him from your experience of him? Yes; examine him myself, so to speak.
4929. *By Mr. Rankin:* You do not mean that you would have a board of examiners to examine such men? No; if the managers themselves were certificated they would see that they got competent men.
4930. *By Mr. Glassey:* Then, you would recommend that the managers, in every case where ten or twelve men were employed, should hold certificates of competency? Yes; I would always advocate that.
4931. In your experience of manager, do you know of any fund established for the benefit of the workmen and contributed to by the workmen and employers? Yes; there was the Permanent Relief Fund.
4932. But that was in the old country? I do not know of any such fund out here.
4933. Would you favour such a fund being established? Yes, I think it would be a wise thing to establish it on the lines of the Permanent Relief Fund.
4934. You know pretty well the margin of profit: would you think ½d. per ton an oppressive charge to make upon the employers? I am not prepared to state what amount.
4935. But would that be oppressive? Well, anything would be oppressive at present, because the price of coal is not what it should be.
4936. *By Mr. Thomas:* Would you recommend that ½d. per ton should be taken from the masters, and nothing from the men? No, I think it should be something on the lines of the Permanent Relief Fund in England—both sides should contribute.
4937. *By Mr. Glassey:* So that you think ½d. per ton would not be an oppressive amount for the employers to contribute? I am not prepared to answer that, because I have not given it much consideration.
4938. And whatever was contributed by the employers, the men should be called upon to contribute something? Yes, I believe in that.
4939. Now, in the mine you have been at recently did you keep medical comforts in the event of accidents—stretchers, bandages, and that sort of thing? Where I am at present there are those sort of things.
4940. But where you have been? No, we had none of those things.
4941. *By Mr. Rankin:* In the first pit that you had, did you finish it and take out the pillars? No, I did not finish it.
4942. But did you take out any pillars? A few.
4943. Did you ever see any gas in taking out the pillars? No.
4944. It did not occur to you to use safety lamps in taking out the pillars? No.
4945. *By Mr. Fryar:* I think you said that where no gas had been seen you would not advise the compulsory use of safety lamps when making the morning examination? No, I would not advise it.
4946. But where a little gas had been seen, you think the workings should be examined with a safety lamp? Yes.
4947. How would you define a little gas? If it could be detected at all—once detected—I consider it is time to examine with a safety lamp.
4948. You told us that at the Riverbank Colliery you saw a little gas? Yes, but I did not carry out my ideas there, although that is my opinion all the same.
4949. You did not act up to your belief in that case? No.
4950. *By the Chairman:* Do you think examination with a safety lamp ought to be made compulsory for any length of time after seeing gas in small quantities? No.
4951. Only for a certain time after gas had been seen? There should be some limit.
4952. What would be a fair limit of time after seeing gas? I should say about twelve months.

JOHN POTTS, miner, examined: J. Potts. 18 May, 1900.

4953. *By the Chairman:* Are you a practical miner? Yes.
4954. Where are you working now? At the Dinmore New Swanbank Colliery.
4955. How long have you been working there? About three years.
4956. Have you worked in this district before that? Yes, for fifteen years.
4957. What mines have you worked in chiefly? I have worked in the New Chum and Stafford's, Ebbw Vale, and at the Borehole.
4958. Had you any experience of coal-mining previous to that? Yes, in the old country.
4959. Which part of the old country? Cumberland.
4960. How long were you in Cumberland? Fourteen years.
4961. Then you have had twenty-nine years' experience altogether in coal-mining? Not in coal-mining altogether. I was working in the iron ore mines in Cumberland.
4962. In any of the mines that you have worked in in the Ipswich district have you met with any gas? No, I have not.
4963. Not in any one of them? No.
4964. Have you ever heard from anyone else of any gas occurring in any of them? I have not.
4965. In the mines you were working in in Cumberland had you some experience of gas? Yes, there was plenty of gas there.
4966. Have you worked as a miner the whole time? Yes, the whole time.
4967. Has the ventilation in those mines in which you have worked in the Ipswich district been generally good? I can speak for where I am working; it is very good there.
4968. That is the New Swanbank Colliery, Dinmore? Yes.
4969. What about the ventilation in the others? Well, there were some places that had pretty bad air in them, but in other places the air was good.
4970. Do you mean particular places in the mines? Yes.
4971. But, generally speaking, was the ventilation good? Oh, yes, pretty good.
4972. How was it that those particular places to which you refer were not so well ventilated? Well, I suppose they could not get the air to them properly.
4973. Did they make any attempt to get the air to them? I cannot say that.
4974. Have you worked in any places which were not well ventilated? Yes.
4975. Was any attempt made to ventilate those places? Yes.
4976. By bratticing? Yes.
4977. Do you know whether those mines were examined in the morning before the men entered? I don't know.
4978. You don't know in any case? No.
4979. Don't you know whether somebody went round in the morning to see if the mines were safe? I could not say, but there was a man who was supposed to go round.
4980. Do you know that there was a man appointed to go round? Yes. I mostly examine my own place when I go in.
4981. *By Mr. Glassey:* You say you don't know whether there has been any person examining that mine before you start in the morning? No.
4982. Don't they put the day of the month or some other mark on some place to indicate that some person has been there in the morning to examine the mine to see whether it is safe or not? Well, they should do so.
4983. But is that not done? No; I scarcely ever see any mark.
4984. *By Mr Rankin:* Do you ever see any? No.
4985. *By Mr. Glassey:* During the time you have been in the mines in that particular district have you never seen a mark in the working places to indicate that some person had examined them in the morning? Yes; at one time that used to be done.
4986. How long ago is that? Twelve or eighteen months ago.
4987. And since that time there has been no mark put to indicate that an examination has been made? I have seen no mark.
4988. The ventilation is fairly good? It is very good.
4989. What other mine were you in before that? Stafford's mine.
4990. Was the ventilation good there? Very good when I was working there.
4991. You yourself have not seen gas? Not in this district.
4992. Have you seen any black damp at all? No; I have not.
4993. Is there any particular place for the men to remain during the time the examination is going on in the morning? No.
4994. You go straight in to the mine? Yes
4995. Do you get any report on the top, or at the bottom, to the effect that the mine has been examined? No.

WILLIAM NEILSON, miner, examined: W. Neilson. 18 May, 1900.

4996. *By the Chairman:* Are you a miner? Yes.
4997. Where are you working? I was working in the New Chum Colliery.
4998. Has that mine stopped working for some time? It has not been working for the last eleven weeks.
4999. How long have you been working in the New Chum Colliery? I have been working there constantly for three years, and off and on for about sixteen years.
5000. Where were you working before you started to work in the New Chum Colliery—that is, before the sixteen years you have been there off and on? I was working in New Zealand and then in New South Wales.
5001. Have you ever worked in coal-mines in the old country? Yes.
5002. In what part of the old country? Lanarkshire.
5003. During the last sixteen years you have been working chiefly in the Ipswich district? No; I have been twice to Newcastle during that time.
5004. How long were you at Newcastle? Two years one time, and eighteen months another time.

W. Neilson. 18 May, 1900.

5005. Is the New Chum the only mine you have worked in in this district? No, I have worked in six or seven mines here.
5006. What length of time did you work in those mines? It might be six months—sometimes more, and sometimes less.
5007. When you were working in the New Chum Colliery did you see any inflammable gas there? No; I have never seen gas, only at one place, that is at Gogg's, at Wolston, where we were boring, and gas used to come out of the bore.
5008. Have you ever seen gas in any workings? No, I have never seen gas in any workings in Queensland.
5009. Have you had any experience of gas outside Queensland? Oh, yes, I have the mark of it on my face.
5010. While you have been working in the New Chum has the mine been examined in the morning before you went in? Within the last six months it has.
5011. Was that not done before? No; I was generally the first man down after the deputy.
5012. Did not the deputy go round the mine in the morning before six months ago? No.
5013. In other mines that you have worked in here has it been usual for the deputy to go round and examine the mine in the morning? No, I never saw one in any mine I have worked in in this country before the last six months.
5014. Were you not kept at some place in the morning until a report was received, before you were allowed to go to your working place? No.
5015. Then so far as you know nobody went round? Oh, yes, I have seen a man go round, for I have gone down with him myself.
5016. What you say is that, so far as you know, until the last six months nobody used to go round and examine the working places before the men went in? Not one.
5017. Was the New Chum Mine fairly well ventilated? There was some of it very bad.
5018. Which part was that? If we were driving a heading or a level we might go 50 yards, and they would never put a bit of a screen up, and there was no return.
5019. Did they ever put any brattice up? No.
5020. Did you ever ask for it? We have asked for it, and the manager has said that we could not get it.
5021. How long ago was that? We have asked him many a time.
5022. How long is it since the last time you asked him? I could not say; but we have asked him many a time, and I have heard the manager say he could not get the stuff to put up any bratticing.
5023. Who was the manager? Mr. Jeffrey.
5024. *By Mr. Fryar:* What age are you? Sixty-seven.
5025. How long have you been in the mines? Over fifty-six years.
5026. That is a fair amount of experience? Yes.
5027. Are you working anywhere now? No.
5028. On strike? Yes, on strike.
5029. Is it long since that incident occurred when you could not get bratticing? Yes, I heard the manager say many a time that he could not get it.
5030. Is it long since the latest case of the kind? I could not tell. They never put a brattice in when driving a level or heading.
5031. *By Mr. Glassey:* Are you not supposed to build up the gob behind you, and carry the air that way? No, because there is nothing but slack to make it with.
5032. So that your means of ventilation is cut off by taking everything out of the mine? Yes.
5033. What mine did you work in in Lanarkshire? Baird's Summerlea, Longloan; and I have worked in Kipsbyer's and Burney Brae.
5034. Did you ever discover gas in any of those mines? Yes.
5035. Who were the proprietors of Kipsbyer's? I was working in the ironstone for William Simpson.
5036. How long is it since you first came to this district? It is thirty-six years since I landed in Brisbane.
5037. You worked at Redbank? Yes.
5038. With Mr. Lewis Thomas? He had just left.
5039. In the mines in New Zealand and at Newcastle where you worked did you see any gas? Yes, I have seen it at Minmi.
5040. In New Zealand did you see any gas? No, I never saw much of it.
5041. *By Mr. Fryar:* Was that in the North Island? No, in Otago.
5042. *By Mr. Glassey:* You say the ventilation is sometimes deficient when driving a heading or level? Yes.
5043. And the manager said that he could not get bratticing? Yes, he could not get canvas.
5044. And it is only within the last six months that there have been any stations allotted to the men to stop at during the examination of the mine in the morning? Yes.
5045. When the examinations have been made during the last six months, have any marks been left in the places to show the men that the workings had been examined? No marks.
5046. How do you know the fireman had been there? I have seen him there. In the Newcastle district they put the day of the month on the face or roof.
5047. *By Mr. Rankin:* What mine were you working in before you came to the New Chum? At Stockton.
5048. But in this district? In the New Swanbank.
5049. How long ago? Fully four years.
5050. Did they examine the places there? No.
5051. And did not leave any mark? No.
5052. There was no appointed place for the miners to meet? No.
5053. No gas was ever seen there? No.
5054. *By Mr Glassey:* When speaking of the New Swanbank, do you refer to the New Swanbank at Dinmore? At Dinmore.
5055. How long did you work at the other Swanbank? About six months.
5056. How long ago? About five years ago.
5057. During which time you never saw any gas? No.
5058. Was the ventilation fairly good there? In some places it was, and in some places it was not.
5059. *By Mr Rankin:* Was it fairly good at Dinmore? In some places it was.

JOHN STAFFORD, mineowner and mining manager, examined:

J. Stafford. 18 May, 1900.

5060. *By the Chairman:* You are one of the owners of Whitwood Colliery? Yes.
5061. Are you the manager of the mine? Yes.
5062. How long has that colliery been working? It has been working about twelve years.
5063. And the whole of that time have you and your brothers been the owners? Yes.
5064. Have you had experience of any other mines in this district, or been connected with them? I have worked in them.
5065. Which have you worked in? In the Tivoli, Goodna, Redbank, and Aberdare Collieries.
5066. How long is it since you worked in Aberdare? That is the last one I worked in, about fifteen years ago.
5067. Had you any experience in mining before coming to this district? I was six years in the old country, as a lad. I started mining in 1859.
5068. Which part of the old country? Yorkshire. I was working for Henry Briggs and Sons.
5069. In Whitwood have you seen any inflammable gas? No.
5070. Not at any time? Not at any time.
5071. Have any of the miners reported the occurrence of gas? No.
5072. And in the other collieries in this district in which you have worked have you seen gas? No, I have never seen any gas since I have been in the country—no explosive gas.
5073. In Yorkshire I suppose you have seen some? I saw a little there. Of course, I was only a lad at the time. The principal workings where I was were worked with a naked light.
5074. Your experience has been gained chiefly in this district? Yes.
5075. How long have you been in the district? Nearly thirty-five years.
5076. And have you been connected with coal-mining the whole of that time? Yes.
5077. And during the whole of that time you have never seen gas? No.
5078. Have you ever seen black damp? Yes.
5079. In what mine? I see it pretty well every day down at the Whitwood Mine.
5080. Do you get any quantity of it? It is on the edge of the falls.
5081. Have you ever had any accidents through suffocation from black damp? No.
5082. And when you see it what do you do? I try and convey the air to it as soon as possible.
5083. What has been the custom in Whitwood with reference to the examination of the mine in the morning? We have a man for each district who goes round in the morning and examines the workings carefully.
5084. Is that before the men enter? They go down before 7 o'clock. The men who examine the mine are down as a rule before the miners.
5085. Do these men make a report as to the safety of the mine before the men go into their working places? Where the places are safe the men go, but where there is likely to be any danger the deputy is always there first.
5086. And where do the men wait?—They wait on the flat.
5087. You say not all the working places are examined before the men enter? Not all, but they are examined during the day.
5088. Why is that not done?—Is there not a clause in the Act which says that all the working places shall be examined before the men enter? Yes; there is a clause in the Act which says that they should be examined.
5089. Before the men enter? Yes.
5090. Why is that not carried out? We have not seen it really necessary. All the other parts of the workings where there is likely to be any danger are examined. The deputies could not get round to the whole of the places without starting very early in the morning. They would have to go in between 4 and 5 o'clock in the morning to get round all the working places.
5091. But the Act says they shall go round all the working places? Yes.
5092. And you have not carried out the Act in that respect? Not to the letter.
5093. Only where you think it necessary? Yes, where I think it necessary.
5094. Might there not be some danger, if not from gas, at all events from unsafe roofs? No, the roofs are very good. The places where the roof is bad are the places that are inspected. In other places where the roof is good, and where there is good ventilation, it is hardly necessary to inspect the first thing in the morning as we have never seen any appearance of gas. So long as the deputies are there between 7 and 8 o'clock we think it is safe. They are generally round the workings by 8·30. They make their reports at breakfast time, between 8 and 9 o'clock. They have visited the whole of the mine by that time.
5095. At what time are the men allowed into the places that are likely to be dangerous? They do not go in until the reports are given. They are allowed in when the deputy has been round. The reports are entered up in the books.
5096. Who does the deputy make his report to? He enters it in a book.
5097. At what time is that? About 9 o'clock.
5098. Do I understand that the men who are working in the places that are not considered safe do not enter until then? No; of course the deputy is there and he tells the men that it is safe to go in.
5099. Do you not think it would be better to carry out the Act? Perhaps it would be; but really I do not think it is necessary. You know perfectly well that the roof is good and sound and everything in good order. So long as the deputies are round the places by 9 o'clock that is sufficient.
5100. At any rate the Act has not been carried out in that respect? No.
5101. Has the deputy ever reported the occurrence of gas? No, never.
5102. How do you produce your current of ventilation? By the exhaust from the engine below.
5103. At which shaft is that? There are two upcast shafts there, but I intend partitioning one of them off.
5104. Is your upcast shaft your working shaft? It is, but the principal upcast is a new shaft that is being put in.
5105. Which is the downcast shaft? The tunnel.

J. Stafford. 18 May, 1900.

5106. Do you think it is a good method to have your winding shaft an upcast shaft? No, I do not. That is the reason why we are putting the second shaft down.
5107. And that has not done what you expected it to do? Not exactly in taking the downcast of the other shaft, and I believe that is on account of the steam pipes in the other shaft. When I get the pipes partitioned off then it will take the downcast.
5108. What is the relative height between what you call your upcast shaft and the working shaft—which is at the highest level? The upcast shaft.
5109. What is the difference in the level? Above 5 feet from the surface, but we had it carried up to about 20 feet.
5110. What distance are the two shafts apart? About 70 feet.
5111. What depth is your seam in the shaft? One is 244 feet and the other is about 256 feet.
5112. The upcast is 256 feet? Yes.
5113. Your ventilation goes down hill? Yes.
5114. What seam are you at present working? We are working what is termed the 4 feet or Dinmore seam.
5115. And what is your system of working? Stoop and room.
5116. What is the width of the rooms? They vary from 7 to 8 yards.
5117. And the pillars? They vary. Some go as high as 12 yards. Others run 4, 5, 6, and 7 yards.
5118. What length are they? We generally cut a hole through every 20 yards.
5119. What is the length of the pillars as a whole? Sixty to 70 yards.
5120. I want to know the length of the pillars before you put in the room through? Twenty or 30 yards.
5121. Have you had many complaints about the ventilation? No. Sometimes the men have complained about it being a bit warm in places; but you will get such complaints anywhere.
5122. Are steam pipes the only artificial means of ventilation you have? That is all at the present time.
5123. Are they in the working shaft? The steam pipe is in the working shaft, but the exhaust is in the upcast.
5124. You say you have sometimes had complaints about the ventilation? Yes.
5125. Have you generally given those complaints attention at once? Yes. You will always find men complain a little if it gets a bit warmer than ordinarily.
5126. When the deputy goes round does he use a safety lamp or a naked light? A naked light.
5127. Not having seen any gas in the mine, do you think it necessary to use a safety lamp? No, I do not.
5128. Are you working the pillars? Yes.
5129. Have you seen any gas at all in working those pillars? No.
5130. Have you worked any other seams in the same ground? No, only the upper part of the present seam. There is about 17 feet between the two.
5131. Is there any gas in the seam in that portion? No.
5132. Have you had any complaints from the men as to the heat at the bottom of your shaft? No.
5133. Isn't it very hot there? It is warm.
5134. How do you propose to remedy that? I propose to put a partition down the same as we had when we had the second shaft.
5135. When do you propose to do that? I have the timber there now, and will, perhaps, be starting to-morrow. That will confine the steam pipes within a small portion of the shaft, and will cause a little upcast on that side, and bring the downcast down the air shaft.
5136. In the other mines you have worked in at Tivoli, Redbank, and Aberdare, have you seen any gas at all? No.
5137. Never in the district? No, never in the district.
5138. Were you working in those places as a miner? Yes.
5139. Did you ever have any complaints to make as to the want of ventilation? I have heard complaints at times when a place has been a little warm, the same as we get every day; but, at the same time, I knew very well that they could not alter it until they got a hole through to get the ventilation over the ground. In all mines you have to put up with that.
5140. Am I to understand that, generally, you think the ventilation was fairly good in those mines? Yes.
5141. *By Mr. Rankin:* In putting that partition in the shaft for your upcast, are you going to have the down steam pipes in the same position as the exhaust pipes? No; that is why I am putting the partition in. If I had the steam pipes in the same shaft as I have the exhaust pipes I would not require the partition.
5142. Don't you think it would be better if you had them both in the one shaft? I think it would be better, but the partition will answer the same purpose.
5143. This partition will partition them off the downcast? Yes.
5144. I was thinking that if you had the steam pipes in the upcast, along with the exhaust, it would assist the ventilation very much? I am quite well aware of that.
5145. Because you would have the heat of the pipes heating the air going down, and that would assist the expansion of the air going up? I only require that downcast to clear the bottom and the main roads.
5146. Still, it would be an advantage it you had them both in the upcast shaft? Yes.
5147. *By Mr. Glassey:* Is there any insuperable difficulty in the way of that being done? We would have to get a new set of pipes altogether, and that means considerable expense, before we could remove the others. I don't think we could put those pipes in there under £130.
5148. Supposing you had a pretty long holiday, couldn't you remove the present pipes, and put an addition on the surface, in a way that would not be very expensive? It is very likely that you would pull those pipes to pieces in taking them out, and they would be useless; so that you would have to get a new set of pipes right down.
5149. Will the men still continue to go down where the steam-pipes are? No, they won't in future.
5150. There will be no men going up and down that particular portion of the shaft where the steam-pipes are? No.

5151. At the same time the bottom will continue to be very hot? No.
5152. Not so hot? Not so hot; there is very little heat in the bottom.
5153. The heat will still be in the bottom, so that that difficulty will not be obviated to any appreciable extent? Oh, yes; you will get the full force of the air going down the shaft. Before we had the tunnel there we had it in that same way, and still it was cool.
5154. Did I understand you to say that there are 70 yards between the two shafts? No, 70 feet.
5155. What is the distance between the shaft and the bottom part of the tunnel? About 11½ chains.
5156. That is 250 feet or so? Yes.
5157. Have you any men there? Yes, that is our main travelling road for the men.
5158. Have you a connection between the two shafts? Yes.
5159. And if any difficulty should arise in the shaft you have an outlet at the tunnel? Yes.
5160. So far as ventilation is concerned, you have abundance of facilities for ventilating the mine? Yes.
5161. I understood you to say that you were sometimes troubled with black damp? Yes, but that is only where the pillars have been worked out.
5162. To what extent is that? Along the whole of our eastern boundary.
5163. What area would that be? About 18 chains by 9 chains. [*Witness measured distance on the plan.*]
5164. Is that your regular plan of the mine? Yes.
5165. *By the Chairman:* Who made that plan? Mr. Hardgreaves. It has been in use for the last six or seven years.
5166. *By Mr. Glassey:* How often do you bring forward the workings on that plan? About every six months, and sometimes less than that if it is necessary.
5167. What is the last date on which the workings have been brought forward? About three months ago.
5168. How many men have you employed in your mine? Down below 118 men and boys, all told.
5169. Is that in the one mine? They are all in the one mine.
5170. Are those men in different sections of the mine? Yes, in different sections.
5171. How do you convey the air to the different sections—by means of splits? By means of splits.
5172. Is there any one section of the mine in which there are the maximum number of seventy men employed? No.
5173. How many splits have you in your mine altogether? We have two.
5174. And you have regulating doors to distribute your air? Yes.
5175. You also keep a book as general manager? Yes.
5176. How often do you make your reports? Every week.
5177. How often does the underground overman make his reports? Every day.
5178. One hundred and eighteen men and boys would be equal to about eighty hewers? Yes.
5179. How many of the eighty hewers are on the pillars? About forty.
5180. I understood you to say that it is only at the pillars that the examination takes place every morning? No; the examination is made all round, but that is the part they go into first in the morning.
5181. And the men commence at what time? Between 7 and 8.
5182. At what time does the fireman go down? He is down before 7.
5183. So that he has little more than half-an-hour? All that.
5184. Is that sufficient time to enable him to go all round? He has two hours to go round the whole workings.
5185. But I am speaking of the time before the men commence. Is that sufficient time for the deputy to go round the whole workings and be able to report on the safety of the mine before the men start work? I have three men for that purpose—one for each section—so that half-an-hour will complete each section.
5186. Does each one of these men keep a book? Yes; each one.
5187. Can I have a look at those books? Yes. The reports are in this book copied from the men's reports.
5188. I want to see the men's reports themselves and not copies? These are the men's reports.
5189. With each man's signature? Yes.
5190. Is that the principal duty of these men, or do they work on the coal? They are roadsmen or deputies.
5191. So that you have three deputies? Yes.
5192. Each of whom is expected to examine his particular section? Yes, there are three deputies whom I hold responsible for examining the workings, and then there is the head overman, who passes through during the day.
5193. Now, is there any particular place where the men are supposed to stop until report is made that the workings are safe? On the flat nearest to that particular section.
5194. Is there any mark made by the deputies in the places which they have examined? I do not think they make any particular mark there.
5195. Then when a miner goes into his place, how does he know that anyone has been there before him and examined it? He meets the deputy on the flat in the main road.
5196. But what guarantee have the men, except the examiner's own word, that he has examined their places? I do not know that they have any particular guarantee. The deputies do not as a rule mark the day of the month in the places.
5197. Would that not be a desirable thing? I think it would.
5198. Now, in reference to the deputies you employ, have you any means of testing their capabilities for filling those positions? They are picked because they have been in our employ for a long time and are known as trustworthy men.
5199. You have never had any experience of gas yourself? No.
5200. Have you ever seen any gas at all in any of the mines in the Ipswich district? No, in none of the mines.
5201. Not in any of the cavities after the pillars were removed? No.

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5202. Have the men in your employ ever availed themselves of that provision in the Act which enables them to examine the mine periodically? No.
5203. They have never asked for such a thing? They have had the privilege to do so if they choose.
5204. Can you explain to the Commission if there is any difficulty standing in the way of that privilege being availed of? No, there is not the slightest difficulty.
5205. You would be rather pleased if the men did that? Yes; I have instructed the men, if they see any danger, to acquaint either myself or the overman at once, as we might be passing through, and after we had gone by something might occur. I have told them it is their duty to do that, both for their own protection and for mine.
5206. Would you rather favour than otherwise the men making that examination? Yes, I would.
5207. Have you a supply of medical comforts at the mine in case of accidents? Yes; bandages, splints, and stretchers.
5208. Then, in the event of men being seriously injured, you have means of conveying them otherwise than by means of wagons? We have stretchers.
5209. And also at the top? Yes.
5210. In connection with your mine, have you any fund contributed to by the employers or by the men, or both, which would meet cases of accident? No.
5211. Have you ever discussed with your brothers the desirability of establishing a fund of that kind, or would you, as a proprietor, object to paying, say, ½d. per ton into such a fund to which the men also might contribute? We never have spoken of that.
5212. Would you favour the contribution that I mention? I cannot answer for my brothers.
5213. But speaking individually? No; I do not see why we should be called upon to do so. I think we have quite enough to bear at the present time. I am quite in favour of paying a certain amount into an accident fund if that is established.
5214. Do you think that ½d. a ton would be an oppressive contribution? I think it would make a considerable amount of difference.
5215. You would not favour that? No; I would not. I could not afford it at the present rates.
5216. But you would favour your company paying a small sum into an accident fund? Into an accident fund belonging to the workings themselves. Of course, there is an accident fund for the district.
5217. I suppose you will admit that the present system of collecting contributions when an accident occurs is not the best system? Well, no, I believe it is not; but it is the customary thing, and has been ever since I have been in the district.
5218. When examining the mine in the morning, do you think that, in case gas has been given off during the night, it would be advisable to examine with a safety lamp? No, I do not think it is necessary where you have never seen gas. It might be necessary to take a safety lamp to places where there had been falls, but to take it all round the workings I think is unnecessary.
5219. There are cavities or crevices created by falls where gas might lodge, and other falls which might come would force that gas out. Do you not think it desirable to use safety lamps in such places? I believe it would be advisable to use lamps in particular places, but I do not think it necessary to examine the whole workings with a safety lamp.
5220. But where is the insuperable difficulty? I do not know that there is any great difficulty about it. It is a little bit of trouble, and the men do not care much about it. I do not see why it is needful. If gas had been seen in the mine at any time, then I would consider it necessary to use safety lamps.
5221. That is in the morning before the men commence work? In the morning.
5222. Have you a furnace at your mine? No, I had one, but I pulled it down.
5223. Does the exhaust steam keep going all night as well as all day? No.
5224. So that you have no artificial means of creating a current of air when the men are not working? No.
5225. And the same applies on Sundays and holidays? Yes.
5226. Does the air not get slack during that time? No, I have never found much difference. The current might not be as good, but, considering that the men and horses are out of the mine, I think it is as good. Their withdrawal makes all the difference. With the shafts as they are at present, everything is perfectly safe as far as ventilation is concerned.
5227. *By Mr. Rankin:* Do you bring the horses up every night? Yes.
5228. You have three deputies? Yes.
5229. I think Mr. Glassey asked you if they were experienced men. Did they gain experience under yourself? Yes, and in the old country.
5230. You are satisfied from your own experience that they are competent men and trustworthy? Yes, I believe they are three as steady men as are to be found in the whole district.
5231. *By Mr. Glassey:* Do you keep any record with regard to the number of cubic feet of air circulating in your mine? No, we have not got an instrument for that purpose.
5232. Do you keep a barometer or thermometer at the mine? No.
5233. *By Mr. Fryar:* You have told us that the horses go up the tunnel? Yes.
5234. Is the tunnel used as a travelling road for the men? Yes.
5235. They don't go up and down the shaft? Only the old men; I allow the old men to go down the shaft.
5236. In answer to Mr. Glassey, you said that for your protection, and for the protection of the men, you would like the men to examine the mine under that provision of the Act which gives them the right to examine it? Yes.
5237. In what respect would that be a protection to you? It would satisfy them, and it would satisfy me if they went round and examined the mine in compliance with the Act. I think they ought to avail themselves of the privilege given them by the Act if they wish to have the Act carried out.
5238. *By Mr. Glassey:* By giving confirmatory evidence as to the safety or unsafety of the mine? Yes.
5239. *By Mr. Fryar:* But is it not objected that if the men go round and certify in a book kept for the purpose that the mine is safe, and an accident happens, that they will be to blame as well as you—that is, if either of you are to blame? I don't quite follow you.
5240. You go round in the morning, and certify that the mine is safe? Yes.

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5241. Then if an accident happens the men may come on you, and say it was not due to any fault on the part of the men? Yes.
5242. But if the men go round and say the mine is safe, what would happen then? Well, that would protect me.
5243. And what position does it place the men in? That they have examined the place, and must therefore come to the conclusion that it was an accident.
5244. Is that not one of the reasons why they do not avail themselves of that provision? That is one of the reasons, and another reason is that they do not wish to go to the expense of an examination.
5245. *By Mr. Glassey:* Some of the men say that if the law permitted them to appoint two competent miners who were not working in the mine to examine the mine, that section of the Act would be availed of. Would you object to two miners outside of your own workmen examining the mine? I do not think that would be right. If our own men are not competent to examine the mine, I do not see why strangers should be put into it.
5246. Some men say that they would be victims in the event of their pointing out any defect in the mine? In reference to that I may say that I have worked nearly thirty-five years in this country, and whenever I have seen anything I thought it was my duty to speak to the manager about I have mentioned it, and I have never been victimised for it. I think Mr. Thomas can bear me out in that. In one instance, when a slip occurred in taking out pieces of coal, I drew his attention to it, and the work was stopped, and he did not victimise me for my action. I think it is only a piece of cowardice for men to say that; it is not manliness. As many years as I have been in the country I have never found a manager who has put his foot down on me, and I have never been in a place that I could not go back to again, though I have always spoken out when I thought anything was wrong.

GEORGE BURFORD, miner, examined:

G. Burford. 18 May, 1900.

5247. *By the Chairman:* What are you? I am a miner, and have been a miner all my life ever since I could work. I started when I was eight years of age.
5248. Where have you been working? I am working now at Stafford's.
5249. In the Whitwood Colliery? Yes.
5250. How long have you been there? Rather better than two years this last time.
5251. How long have you been working in this district? I have been in the district for fifteen years, with the exception of two years when I was absent in New Zealand.
5252. Where were you working previous to that? In the old country.
5253. What part of the old country? In Cambois Colliery, Northumberland.
5254. How long were you in Northumberland? Three years.
5255. Have you worked in any other part of the old country? Yes, in the county of Durham.
5256. Just tell the Commission where you worked? At Monkwearmouth Colliery, at Wingate, and other places.
5257. What mines have you worked in in the Ipswich district beside the Whitwood Colliery? In Lloyd Owen's, the New Chum, and Ebbw Vale. Those are the collieries I have worked in in this district.
5258. Which is Lloyd Owen's? The New Swanbank Colliery, Dinmore.
5259. Since you have been in the Whitwood mine have you seen any inflammable gas there? No. I know what gas is when I see it.
5260. Have you seen any gas in the Whitwood Colliery? No, nor in this country.
5261. You have not seen any in this district during the fifteen years you have been here? No.
5262. Has it been the custom to examine the working places at Whitwood before the men enter the colliery? No.
5263. Were they examined at all in the morning? Not that I have seen.
5264. Is there no deputy or anybody who examines the mine before the men enter? I always go into my place before any deputy gets there.
5265. Do you go down the tunnel and are you not stopped anywhere? No.
5266. And as far as you know nobody is appointed to examine the places in the morning? Not so far as I know.
5267. Has that been the case in all the collieries you have worked in in this district? Yes.
5268. There was no deputy at all to examine the mine? No.
5269. Do you know if a report book has been kept anywhere in these collieries? No; I never had the privilege of seeing one.
5270. Did you ever ask to see one? No.
5271. Then you do not know whether you had the privilege or not? No.
5272. Then why do you tell us you never had the privilege? I never had the privilege.
5273. Did you expect the manager to bring it to you? No.
5274. Then you did not want to see it? I did not know of any book.
5275. You do not know that there was not one? No.
5276. What about the ventilation in the mine? It is fairly good. I cannot complain. I am working in the first air in the pit in the Whitwood Colliery.
5277. *By Mr. Rankin:* You say you do not think any examination was made in the morning? No.
5278. Have you ever had any instructions to wait until you saw some mark before you went into your place? No; only when I was going to a fresh place.
5279. And someone would come and show you where to start? Yes.
5280. After you started, was there never any examination, or any arrangement to wait until your place was examined? No.
5281. You just walked in of your own accord? Yes.
5282. Has that been the case in all the collieries you have worked in? Yes.
5283. And what collieries have you been in? Aberdare, Ebbw Vale, Dinmore, and Stafford's.
5284. None of those collieries kept a register, showing whether the pit was safe, or had a man to examine the places? Not that I am aware of.
5285. You saw no indication that any record was kept? No.
5286. No mark on the face showing the day of the month? No.

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5287. If there had been anything of the kind, would you have known of it? Decidedly so. In the collieries in New Zealand you could not go beyond the caution board until the fireman came out, and the day of the month was marked on the place.
5288. And that is not done here? No.
5289. There is no caution board? No.
5290. You go in and out as you have a mind to? Yes.
5291. *By Mr. Glassey:* Did you ever see any gas in the Cambois mine? No.
5292. Was Pemberton's Colliery a gassy mine? Yes, very.
5293. Did the men and boys all work with safety lamps? Yes.
5294. You would have no difficulty in discovering gas quickly here if it existed? No.
5295. Going down the shaft in the morning I think you said there is no particular place at which the men stop until a report is received as to whether the colliery is clear? No.
5296. And there is no mark on the working places to show that they have been examined? No.
5297. And that has been the custom throughout in the district? Yes.
5298. You say the ventilation is fairly good? Yes, good enoggh where I am working.
5299. But in any of the other mines have you found the ventilation good or bad? Pretty fair. Sometimes I have seen a little black damp in the New Chum and in Ebbw Vale.
5300. Have you seen it in any quantity? A little where we were getting the pillars out, and when there has been a fall; but then the deputy put brattice up, and that wafted it out.
5301. Have you ever known the men to meet together for the purpose of considering the advisability of taking advantage of that clause in the Act which enables them to examine a mine themselves. No.
5302. Have you ever heard the subject discussed among the men at all? No.
5303. *By the Chairman:* Did you know there was such a clause in the Act? Oh, yes.
5304. You are taking out the pillars now? Yes.
5305. How long have you been at that particular work? About six or eight months.
5306. So that when taking out the pillars there is no report made in the morning as to whether those particular places are safe or not? Not that I am aware of—not to the men.
5307. Does the deputy visit you during the day? Yes; he is round two or three times a day.
5308. To see the condition of the place? Yes. He comes round in the morning just after we get there, and he is round a time or two in the day, and again at night.
5309. Does the deputy set your timber? We set the timber ourselves.
5310. In the event of the ventilation being slack, do they usually put in brattice to keep it up to the working places? Yes.

JOHN MORTIMER, miner, examined:

J. Mortimer. 18 May, 1900.

5311. *By the Chairman:* Where are you working now? At Stafford Brothers', Whitwood.
5312. How long have you been there? About three years.
5313. And how long have you been in the district altogether? Fifteen years to about a month.
5314. Did you work in coal mines before you came to this district? No; I never worked in coal mines in the old country; I worked in ironstone.
5315. Where was that? In Yorkshire—Cleveland.
5316. What mines have you worked in in this district besides Whitwood? I have worked in the Borehole, New Chum, Ebbw Vale, Waterstown, Walloon, and at Gowrie for about twelve months.
5317. Have you seen any gas in any of those mines? No; I have never seen any.
5318. Not in any of them? Not in this country.
5319. What seam were you working in at Waterstown? It is about ten years since I worked there; it was soon after the shaft was sunk.
5320. What depth in the shaft was the seam? I do not know what depth it was down the shaft. The seam was 3 feet 6 inches thick.
5321. You never saw any gas there? No.
5322. Have you had experience of gas in the ironstone mines? Not much—only where the roof came down.
5323. Though you have had a long experience of mining you have had very little experience of gas? I cannot say I have had any experience whatever of gas.
5324. Have these mines been fairly well ventilated? I think they are fairly well ventilated. Of course they are only small mines. I do not consider West Moreton was well ventilated. I worked there during the first two years it was opened, and the ventilation was worse then than it ever was.
5325. They had no connection then with any other shaft? No.
5326. Are the workings examined before you go into them in the morning? No, they are not.
5327. And no marks are made to show that they have been examined? No, not before I go in.
5328. But before most of the men go in are the working places examined? I do not think so. I think they are examined before 9 o'clock.
5329. *By Mr. Glassey:* After the men start? Yes.
5330. *By the Chairman:* Was that the case with the other mines you were working in in this district? Oh, no.
5331. Were they examined before you went in? Some of them were never examined at all.
5332. Which were they? I don't remember any of them being examined, with the exception of Whitwood—not to make it a practice of examining them every day.
5333. Wasn't Waterstown? Not when I worked there.
5334. How long ago was that? Nine or ten years.
5335. How long is it since you worked in Ebbw Vale? Three years.
5336. Wasn't that examined at all? Not before the men entered; there was no one responsible for an examination of the mine.
5337. Was there no deputy? No.
5338. Was it the same with regard to the New Chum Colliery? Yes; just the same. Perhaps they would examine it for a few days running, and then there would be two or three days on which no one came.
5339. *By Mr. Rankin:* What other collieries do you say you have worked in besides the one you are working in at present? I worked at Gowrie about five years ago.

5340. While you were at Gowrie did you find any gas there? No.
5341. Was that colliery well ventilated? Well, near the shaft bottom it was.
5342. But not the faces? No, not the faces; in some of the faces there was no ventilation whatever.
5343. Gowrie must be in a very bad state if that is the case. How did the men manage to get in and out? It was badly ventilated when I was there. There was plenty of air, but it was not conducted.
5344. Plenty of air on the top? No, down at the bottom; it only wanted conducting.
5345. How many men were employed there? Thirty.
5346. Had they no artificial or mechanical means of ventilation at the mine? Yes; they had a shaft down, and a furnace.
5347. Had they an upcast shaft? Would you like me to give you an explanation?
5348. Yes? Well, the shaft was sunk down, and a heading was driven so far up; the first heading was the furthest in, and the next was not so far. The manager drove a place from the shaft bottom to the end of the furthest level—that was the first level—and up the bottom at the furthest end. That forced the air up the first place, and it came down the second, and went back, and the top level where I was working was not ventilated at all. Of course, I drew the manager's attention to the matter, and he said what he would do, if he could do as he liked, was to give every man separate air to himself, but it would not be fair to draw air from the second level to the first level. I considered, however, that that would be better than no air at all.
5349. Did he make any alteration? Not while I was there; and I left shortly after that.
5350. How long were you there? The first time I had no fault to find, because the working was near the bottom. The second time I worked there three years.
5351. What other mines have you been in? In West Moreton—and it was not very well ventilated. Wright's Eclipse Colliery was very fairly ventilated, and Waterstown was not badly ventilated.
5352. You have never complained to any of the managers in this district about the ventilation? No.
5353. *By Mr. Fryar:* Did the manager at Gowrie want a separate supply of air for each man? Yes.
5354. And he could not manage to get it? He told me that if he had been an Englishman, like myself, instead of a Welshman, he would have understood it better.
5355. Do you know which pit that was in? That was in the first pit, and it occurred some years ago.
5356. *By Mr. Glassey:* How long is it since you left Gowrie? It must be five years since I left.
5357. Is the same manager there now? I do not know, but I believe so.
5358. During the last five years you have been at Whitwood all the time? No, I have worked at Ebbw Vale and Whitwood. I have been three years at Whitwood this month or the next.
5359. During the time you have been at Whitwood have you ever had any complaint to make with regard to the ventilation? No, the mine has been fairly well ventilated where I worked. Of course it has been hot in some places, but there has been a good current of air travelling where I have worked.
5360. Have you heard any of the men complain about the air being bad? Well, a good many of them have complained about it being very hot, but I think they mostly agree that there is a fairly good current of air, though some places were warmer than most people liked.
5361. Do you carry your air forward by the building up of the gob, or how? By brattice.
5362. Your refuse is not sufficient to make up the gob to carry the ventilation? No, we leave nothing in but the stone.
5363. At Ebbw Vale was the mine examined in the morning? No, it was not examined in the morning.
5364. Was it examined officially at all during the day? Some days they would go round; perhaps they would do so two or three days continuously, and perhaps they would miss two or three days.
5365. Would they miss weeks in going round? I suppose they would miss a week sometimes. There was no system like there is at Whitwood. At Whitwood I believe the deputy is responsible for being in every place before breakfast, and I believe that is carried out.
5366. But there is no such thing as providing a place for the men to stop at until their places have been examined—there is no such thing? No.
5367. Do you know why the men at Whitwood, and some of the other mines you have been working at, do not take advantage of the provision in the Mining Act which enables them to examine the mine periodically themselves? I really could not say what the reason is.
5368. *By Mr. Rankin:* What is the reason you don't do it? Well, I do not think it is necessary.
5369. *By Mr. Glassey:* Do you not think it necessary for the safety of the mine and so forth? I think if men are expected to examine the places, two picked men should go round with the inspector and show him anything where they think there might be an improvement. If any danger should arise between the visits of the inspector, or any dispute should take place between the manager and the men, then two picked men might go round with the inspector; but as long as things are going on without any dispute, I do not see why the men should be called in.
5370. It is not a question of the men being called in, but a question of calling themselves in for their own safety to see if the mine is safe, and if they find any defect to point it out to the manager? I should not be backward if I saw any defect in my own place in pointing it out to the manager.
5371. *By Mr. Rankin:* You never thought it necessary yourself to get anybody to go with you to examine any of the mines you have been working in in this district? No, I never thought it was necessary.
5372. And you have never heard any of the men suggest such a thing? No, I have not.
5373. And it has not been done to your knowledge? Not to my knowledge.
5374. *By Mr. Fryar:* Are you aware that in addition to the section to which reference has been made there is another provision in the Act which gives you the right to examine the mine at any time if you suspect danger? Yes; I believe the men have that privilege.
5375. Would not the fact that they had not so examined the mine be a very good reason for supposing that they had never apprehended any danger? I look at it like this: I would not do it myself in Whitwood; and I believe I am as well liked as any man in Whitwood, but if the men picked me for that duty I would not go round and examine the places, because they would not be satisfied—they would think you ought to find fault where you did not see anything to find fault with.
5376. *By Mr. Rankin:* Do you think that is the universal feeling among the men in the different mines, that there would be jealousy among them? I suppose you have heard them talk over this clause? Yes, I have heard them talk it over, but I have never yet heard any man suggest that two men should be picked to go round in any pit that I have worked in.

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5377. *By Mr. Fryar:* Suppose the men had no confidence in you, or you had no confidence in yourself, for work of that kind, don't you think there would be two men belonging to the mine who could be trusted to make a trustworthy report on the condition of the mine once a month? Yes.
5378. Do you think the men collectively would not delegate two such men to perform that duty? I don't think they would have any more respect for two men making such an examination than they have for the present Inspector of Mines, and that does not seem to go very far with them.
5379. *By Mr. Glassey:* Do the men think that the mines are in such a condition that such an inspection is unnecessary? No, I don't. I never heard that. I believe a good many men would want the mine inspected every day.
5380. That is to say, they are of opinion that the mine ought to be inspected each morning by some competent person before the men commence work? Well, a good many men think that; but personally I am not prejudiced in favour of it.
5381. *By Mr. Rankin:* It would not do any harm? No, I do not think it would. In the old country I found that wherever there was a fall gas accumulated. I think the experience is the reverse here, because when a fall takes place there is spontaneous combustion. If there was gas, there would be an explosion.
5382. *By Mr. Glassey:* Have you any suggestions to make which would lead to the greater safety of the men and the protection of life and limb? I do not think it would be a bad thing if the inspection of the mines was carried out by the inspector and two miners. The inspector could acquaint the manager that he was coming, and the manager could then get the men to pick out two men to go round with the inspector and show him any places where they thought improvements could be made. As far as ventilation is concerned, I do not think it would do any harm if the Act provided that some responsible official in the pit should go round every airway at least once a week.
5383. *By Mr. Rankin:* That is in the Act already? And that each airway should be not less than 4 feet high and 4 feet wide.
5384. *By Mr. Glassey:* You said it would be a good thing for the inspector to be accompanied by two miners? Yes.
5385. Do you think it would be a proper thing that any notification should come from the inspector that he is going to visit the mine? I do not mean every time an inspector comes; but when men find fault about different things a way out of the difficulty is for two of them to accompany the inspector.
5386. *By the Chairman:* Do you mean that when an inspector does go two men should be appointed to accompany him? I mean that he might make a special inspection accompanied by two men.
5387. *By Mr. Glassey:* The Inspector of Mines should examine the mine whenever he thinks proper, but occasionally he might reasonably invite two men to accompany him on some special inspection—is that what you suggest? Yes.
5388. *By Mr. Rankin:* Is it your opinion that jealousy would arise between the men if two men were picked out to go with the inspector; is it not possible that some of the other men would turn round and say those men were favourites? I would let the men pick their own representatives.
5389. *By Mr. Thomas:* Have you ever been in any pit where the men would be afraid to tell the manager that there was anything wrong in any of the places? No, I am not one of those who are afraid to say what I think, and I am always prepared to take the consequences.
5390. But were you at any time afraid that if you found fault you would have to go? No; I do not think so. I have had a good deal of experience, and have said a good many things in my time. I have been unfortunate, and have been out of work a good long while, but I don't know that I have ever yet been made a victim on account of my opinions.
5391. *By Mr. Rankin:* Does such a feeling prevail with any of the men? Yes, I believe that feeling does prevail.
5392. They are frightened to speak? Yes, that feeling prevails to a great extent—more, I think, than there is any necessity for.
5393. *By Mr. Fryar:* Would it not be a great advantage to the owners and managers if they were informed of the probability of an accident occurring? Where there is any danger I think the men should call the manager's attention to it.
5394. Would that not be an advantage to the owners and managers? I should think so.

(Ipswich.)

TUESDAY, 22 MAY, 1900.

PRESENT:

MR. RANDS	MR. GLASSEY, M.L.A.
MR. FRYAR	MR. RANKIN

MR. THOMAS.

MR. WILLIAM HENRY RANDS, CHAIRMAN.

ALEXANDER ORR, chairman of directors, Aberdare Co-operative Colliery, examined:

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5395. *By the Chairman:* Are you chairman of the directors of the Aberdare Co-operative Colliery? I am.
5396. Are you working in the colliery? Yes.
5397. How long have you been there? I suppose I have been there sixteen years at least.
5398. What experience had you in coal-mining before that time? I have been associated with coal-mining all my life, since the age of ten years. I had two years' experience under Mr. Gulland at Tivoli, and four months in the Borehole, driving the dip. Previous to that I had ten years' experience in the East of Scotland—in Haddingtonshire. I worked for Deanes and Moore and Doorie and Nisbet.

5399. During the time you have been in Aberdare have you ever seen any fire damp? No; that is, if by fire damp you mean carburetted hydrogen.
5400. In the time you were in the Tivoli Mine did you see any gas? Never the slightest indication.
5401. Have you ever seen any in the Ipswich district? No; none at all.
5402. In Scotland had you any experience of gassy mines? No; not in the mines I worked in.
5403. Never any at all? Never any at all.
5404. Then practically you have had no experience of gas? No practical experience of fire damp.
5405. Have you any black damp in Aberdare? Any amount of it.
5406. Have you ever had any accidents from black damp? No.
5407. You get rid of it through ventilation? Through ventilation.
5408. How do you produce your current of ventilation at Aberdare? It is produced in the large shaft by means of the exhaust steam from the pumps. In the other shaft of course it is produced by a furnace.
5409. That is in No. 2 shaft? Yes.
5410. And in No. 3 by the exhaust. Yes, by the steam from the pumps.
5411. In No. 3, which is your upcast? The winding shaft.
5412. Do you think it is a good plan to have the winding shaft as the upcast? No. I do not think it is a good plan, but circumstances over which people have no control compel them sometimes to do things which they cannot help.
5413. Could that not be got over without any great expense or difficulty? Not without a very considerable expense. Of course we have a very large amount of water to deal with—I suppose more than in any other colliery in the colony. We have five pumps working there, and we have to get the steam down the pit to keep the pumps going, and in consequence of the steam coming down the air gets so rarified that it is impossible to make that shaft anything but an upcast shaft. If we had an air compressor or something of that sort we could make the winding shaft the downcast, and by that means we would have improved ventilation, although I do not admit that it is bad now, all the same.
5414. What is the difference in height between the upcast and downcast shafts? They would be very much the same. There might be a few feet difference, but nothing worth speaking about.
5415. Could not the pipes in your winding shaft be cut off by timber? No; the shaft is rather too small for that. It is only 7½ x 9 feet, with a pair of caps in it, and there is little room to partition off the steam pipes.
5416. Is the travelling road to the dip an upcast? The main dip itself is the return. The intake is on the other side, inside a pair of double doors on the southern level.
5417. Is that a good arrangement? Well, I do not know. Of course, you want the truth, and I am here to give it. I think the main road in all cases should be the intake.
5418. *By Mr. Glassey:* Men going with the air instead of against it? Of course you understand that the men practically do not travel in the returns. They have the opportunity of travelling in the intake if they feel disposed. The road rider in the dip workings is in the return all day long, but the bulk of the men themselves have the opportunity of travelling in the intake, which is quite large enough to allow them to do so with perfect ease.
5419. Have you had any complaints from the men in reference to the heat? In the summer time we have complaints sometimes because the ventilation is not so good then as in autumn or winter. The ventilation is fairly good just now. In conjunction with the manager and inspector, I measured the air yesterday at 11 o'clock, and found 26,000 cubic feet of air coming down the main intake.
5420. For how many men? One hundred and four men and four horses.
5421. What is that per man? About 232 cubic feet.
5422. *By the Chairman:* You say you have had complaints in summer? Yes. Of course, you must remember that it is by no means unusual for the Aberdare people to complain of anything.
5423. *By Mr. Fryar:* Especially as they are co-operators? That is just the reason.
5424. *By Mr. Glassey:* Do you think complaints are chiefly centred in Aberdare? I am not prepared to vouch for that.
5425. *By the Chairman:* Do you think these complaints are justified—that they have reason behind them? Sometimes they have reason, but I can assure you that we do our best to make the conditions as good as possible.
5426. Is there any obstacle put in the way of men making complaints? None whatever.
5427. Now, with reference to the examination of the mine; is it examined every morning? Our mine is now being examined every morning according to the Mines Regulation Act. Mr. Fryar called our attention to the new Act, and two men have been appointed to undertake the duty of examination.
5428. How long has that been done? Not very long—perhaps a month or six weeks—but ever since the new Act came into force the examiners have made a point of going down the pit before the men went to work to see that all was well.
5429. And during the last two months two men have been appointed? I do not think it would be quite two months.
5430. Do the examiners use safety lamps? Oh, no. There is no occasion to use safety lamps. They use naked lights.
5431. Have men ever availed themselves of the clause that allows them to appoint men to examine the mine? I do not think so.
5432. You do not know whether they have or not? I do not think they ever have. I believe once or twice during Mr. Thomas's time the men went round. That must be fully twelve years ago.
5433. Do you know of any reason why they do not avail themselves of that provision? I do not know of any particular reason why they do not, unless it is that they are satisfied with things as they are. There may be another reason. Shall I give it?
5434. Yes? Of course two or three men will not go round the workings to examine them without being remunerated for it, and it is a devil of a job to get the money to remunerate them with.
5435. Won't the men pay them? Some will, and some will not.
5436. *By Mr. Rankin:* You mean to say that the reason they won't go round and examine the mine is that they cannot get their pay guaranteed? They do not seem to consider that such a thing is necessary. I dare say that if the thing was really necessary they would do it.

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5437. You don't think they are afraid of the management—that that is the reason? Why should they be afraid of the management? They dictate to the management.

5438. I ask you if you think that is the reason they do not avail themselves of that provision in the Act? No, it is not.

5439. *By Mr. Thomas:* Don't you think the reason is that the men simply object to pay for the examination? If I were to say that, I would make a very sweeping assertion, but I believe that in a great measure that is the reason.

5440. You know that I offered to and did collect the money to pay the men for the examination one month? Yes. I say that section of the Act was availed of once or twice during your experience.

Mr. Thomas: And the men objected to pay the money; that was the reason the examination by the men was not continued.

5441. *By Mr. Fryar:* Are you a co-operative company to work the Aberdare mines? Yes.

5442. And you meet in general meeting, I suppose? The directors meet once a fortnight, and the shareholders meet once in six months for the purpose of considering the directors' report and balance-sheet, and so forth.

5443. And all matters of that kind will be discussed at the fortnightly meetings? Yes. The managers report to the directors every fortnight the condition of the workings, and what improvements they consider necessary for the purpose of carrying on the workings, and the directors, after giving the matter due consideration, carry out any recommendations made if they think it desirable to do so.

5444. Has that matter of using the working shaft as an upcast ever been brought before the general meeting? No, I don't think it has ever been mentioned at a general meeting, but it has been mentioned on several occasions at the board meetings.

5445. And is the reason you have given the reason why it is not altered? Yes.

5446. That it would involve considerable expense? Quite so.

5447. Would the fortnightly meeting of directors be the proper place to suggest an examination of the mine by miners, independent of the examination made by the manager, if they wished to make such a suggestion? Yes, that is the proper place. You, as Inspector of Mines, have complained several times about the ventilation, and your reports were invariably read at the first meeting of the board after they were received, and the matters contained therein have been seriously considered.

5448. I am speaking now with respect to men, who are not managers, wishing to have some additional examination or inspection? If the men have any complaints to make they would appeal in the first instance to the underground manager, and failing to get redress there they can appeal to the board of directors, and the board will do what they consider is right in the matter.

5449. You have spoken of the underground manager—there are dangers at the top of the mine as well as down below, are there not? Oh, yes.

5450. Do those managers take the oversight of both top and bottom? Oh, yes.

5451. I think you said those fortnightly meetings are general meetings? Only of the board of directors.

5452. And the managers? The managers are always present.

5453. Then, if the men desired any further examination than that which is made by the managers, they would have to call a meeting independent of the managers and directors? If the men desired to make an examination of the Aberdare mines there would not be the slightest objection raised by the management.

5454. I am not speaking of any objection being raised by the management, but you see they would have to meet and come to a resolution among themselves before they could bring the matter legally before the manager—they must meet and elect two men to go round and make the examination, and then, according to law, they would have to give the manager twenty-four hours' notice of the proposed examination? Yes.

5455. Have they ever had such a meeting? I can say emphatically that they have never had such a meeting. Our arrangements are that any complaints must in the first instance be made to the manager. Failing to get redress there, the complaints are then carried to the board of directors. Failing to get redress there they can then convene a special meeting by getting a requisition signed by twenty-five shareholders, at which meeting the views of the board and managers can be upset, and the shareholders can take complete control.

5456. That refers more particularly to the settlement of matters between the members of the company. I am speaking of the provision in the Act which empowers the workmen, whether members of a company or not, to elect two of their number to make an examination on their behalf? Such a thing has never been done in connection with the Aberdare mine.

5457. In point of fact the half-yearly general meetings would answer all purposes of that kind? Oh, yes, they can bring on anything they like at the general meeting by giving fourteen days' notice.

5458. I think you said something about black damp. Have you seen black damp often? Oh, yes, any amount of it.

5459. Has that black damp occurred in a particular place or places? Wherever a squeeze comes out and we have a fall, the fall is not there twenty-four hours before black damp begins to ooze out. Whenever we have a fall worth calling a fall, in one or two days you will not be able to carry a light within a yard or two of where the fall has taken place.

5460. Is the ventilation bad in those places? Oh, no.

5461. Is it not singular that black damp coming off a fall should not be carried away with a reasonable amount of ventilation? Of course if the ventilation was carried into places where falls occurred, black damp would be carried out. But supposing a fall was 50 yards in extent, black damp would stay there. If we had gone into those old workings of Ferrett's, which you visited, for a distance of 20 or 30 yards, it is very questionable if we could have carried a light, though we had 8,688·9 cubic feet of air going through that airway.

5462. How far would that be from the surface? Speaking roughly, between 500 and 600 feet.

5463. Have you any idea how far that is from the top of the coal measures to where the overflow of basalt covers them? It is not far above the coal measures. We could walk on the top in many places where it has fallen down. The entire seam, coal and stone mixed, is about 14 feet thick.

5464. That is still the coal measures? Quite so; but that is our experience. When a fall takes place the black damp begins to issue.

5465. Is it usual for large quantities of black damp to come off when you are a long way from the surface? I cannot say; I would not like to be positive.
5466. Have you noticed anywhere else that there were large quantities of black damp when you were a long way from the surface? I have noticed it particularly in the old country. When we were taking out the pillars, and were taking out the props to let the roof down, we would have a little damp, but not in such large quantities as at Aberdare. I have never seen it so strong anywhere as I have seen it there.
5467. Is there any fault on that side? I do not think that faults would be any great factor in the matter. We find it where the seam is perfectly whole; but there is a fault in the section we have just been referring to.
5468. Is it likely that that black damp emanates from crevices near the basaltic overflow? I expect it does. The measures seem to be full of it.
5469. Is it an exceptional circumstance for large quantities of black damp to come off at a depth of 500 or 600 feet? I do not think so.
5470. I am not speaking in reference to the Aberdare Colliery only? No, you find black damp in every mine.
5471. But I am speaking of large quantities of black damp. Do you think it is an exceptional circumstance? I do not think so. I have found it everywhere I have been.
5472. Have you seen any explosive gas in any of the mines in which you have been in Queensland? No, not the least.
5473. *By the Chairman:* You said you thought this black damp was in the crevices below the basalt. At what depth are you working? Between 500 and 600 feet.
5474. And what is the thickness of the basalt? I could not say.
5475. Have you no idea? I had no experience in sinking, and the shaft is timbered from top to bottom.
5476. I believe the basalt is not very thick—about 200 feet. That would be 300 feet between your seam and the basalt. What do you mean by black damp lodging in the crevices below the basalt?—Does not black damp come from the measures themselves without any reference to the basalt? Yes; I believe it does. I will give you the result of my experience on an occasion when I have never known the damp so strong. It was during the time that Mr. Thomas worked the mine. We had a big creep, and the damp came off our two workings. We had to go up the shaft a considerable distance and drive a cross measure to connect with the seam. After we were connected with the seam again, we began to drive in a certain direction on the south side. I drove a cross place there, and eventually we holed into the old workings and the damp came out in clouds.
5477. *By Mr. Thomas:* That would not be near the basalt? No; right down on the seam.
5478. *By the Chairman:* That is why I asked you. You said you thought it was in the crevices below the basalt. Do you think the basalt has anything to do with the black damp? I do not think it has.
5479. *By Mr. Rankin:* You say the shaft is 7½ x 9 feet? Yes.
5480. What room have you got between your rope guides and your cage and the side of the pit? I believe about a foot.
5481. Don't you think that if you were to line up behind the rope guides you could get your steam pipes taken down in that little space, and thus keep the heat off the main shaft?—You would not require a thick partition, and you could then keep the steam in the upcast? But you see, supposing we erected a partition and enclosed the pipes leading to the pumps, we have four pumps in the dip workings, independent of the large pump. That would mean that the whole of the pipes from the surface to the very bottom of the dip would have to be encased, and it would take something to do that.
5482. I suppose your lease has a good long while to run? Yes; a considerable number of years—about eighteen.
5483. And you have a good output? Yes; a considerable output.
5484. Seeing that your lease has so long to run and that you have a large output, don't you think it would be advisable to sink a shaft exclusively for that purpose?—What would it cost to sink a shaft about 6 by 6 feet? I suppose about 30s. a foot.
5485. Suppose it cost 30s. a foot, would that not be a very small thing compared with the output? That would be for mere sinking itself.
5486. You would not require much casing in a shaft that contained nothing but pipes. Do you not think it would be advisable to get that done—allow so much per ton until you had it done? Well, you can find water everywhere, and it would be very expensive.
5487. But you are not far from the other shaft, and you could syphon the water from the other shaft. What I should recommend would be to have another shaft to carry your steam and water pipes, and use the present shaft as a winding shaft only. Would that not be a great benefit? I perfectly understand what you mean. You mean a main pumping shaft, but a main pumping shaft such as would be required at Aberdare would involve an expenditure of about £5,000, and at the present price of coal it would be practically impossible to undertake it.
5488. That is a pity because it is the proper cure? I admit that.
5489. *By Mr. Thomas:* You have a shaft there which might have been used as an upcast? Where is it?
5490. No. 1? I admit that, if the conditions had been favourable.
5491. It was at your disposal, but you never made any attempt to make use of it? When we took over the place the pipes were in the present shaft. The pumps were fixed in the present shaft, with the exception of three we put in ourselves. When we began we began with nothing. How in the name of all that is reasonable could we be expected to remove all these pipes and pumps, and let the pit fill with water?
5492. It would have cost very little? It would have cost a very great deal.
5493. You could have put a furnace or wheel there. There was an engine and boiler and everything complete? Well, it would have cost a great deal of money.
5494. *By Mr. Rankin:* It is a pity it is not practicable because it would be a great boon? I quite recognise that it would be a benefit.
5495. *By Mr. Glassey:* Speaking of the shaft to which Mr. Thomas has made allusion—the No. 1 shaft—which he says was supplied with boilers and engine, supposing you made that shaft the upcast and did away with the present shaft as an upcast, what would be the expense? Very considerable. In the first place we would have to case the whole of our steam pipes in the shaft we have now.

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5496. *By Mr. Thomas:* There is no need to meddle with them? The steam pipes in the downcast shaft would have to be encased, and also in the dip workings. That would involve considerable expenditure. Then we would have to provide a furnace with a very powerful draught at the bottom of No. 1 shaft.

5497. *By Mr. Fryar:* No furnace would do it. You would want a fan? Or a fan. The question is —Where is the money coming from to do it?

5498. *By Mr. Glassey:* Can the ventilation be satisfactory when the heat exists in the shaft where the men are going up and down?—Cannot something else be done at a moderate cost which will improve the ventilation, and at the same time make that other shaft the upcast and put appliances there for the purposes of getting a current? Without going to extremes, I am prepared to vouch that the ventilation of the Coolgardie shaft will compare favourably with the ventilation of any colliery in Queensland without exception.

5499. *By Mr. Fryar:* It is a question of heat, not of the quantity of air travelling? Then it would be necessary to extend the return air as affecting only a few persons. We have 1,300 cubic feet of air going into the stables and the bottom of the pit, and there are only a few men working there. The other sections of the work are all ventilated by splits. I think that as long as the Coolgardie shaft is the upcast shaft the ventilation is as good as we could reasonably expect it to be. Of course we might put a furnace there, but that would hardly be practicable.

5500. *By Mr. Glassey:* With regard to the erection of a fan at No. 1 shaft, was there not an engine and boiler there? They are gone now. As we went to the dip—as we increased our drivings in the direction of the dip—we had water in the workings on the right and water in the West Moreton Colliery on the left, and the increase of water as we increased our workings in the dip was so considerable that the steam power we had was inadequate to cope with the water, and we had to fetch those boilers from the other pit, and they are all required.

5501. With respect to the casing of the pipes in the shaft, and also the casing of the pipes in the other parts which have been mentioned, that would not cost an excessive amount? It would not run into a large amount of money, certainly, and we are seriously considering the question of having them cased with ti-tree bark, which would enable us to get more steam.

5502. The matter is certainly very unsatisfactory at present; the ventilation of your mine may compare favourably with the ventilation of other mines, but in some respects the ventilation of many of the mines is very defective. The great thing is to get the ventilation improved, and I am quite sure that the law will insist upon that, even if it should involve a certain amount of expenditure? Yes.

5503. Where men are working they should have a sufficient quantity of cool pure air to enable them to follow their work comfortably and to preserve their health and prolong their lives? I quite agree with you, and I have been hammering away at ventilation ever since I have been in the colony, because on that men are dependent for their lives.

5504. I think you mentioned that a considerable quantity of black damp comes off, more particularly when falls occur? Yes.

5505. Are those falls a considerable distance away from the men? Yes; if a fall takes place near where the men are working we at once take means by bratticing to sweep it out.

5506. Are you aware whether there are any number of men inconvenienced or affected very much by this black damp when it does come off? I don't think so; I have not heard any serious complaints concerning their being inconvenienced.

5507. Is your current of air sufficient to keep the places where the men are employed free from black damp? Oh, yes; but of course that will depend a good deal upon the men themselves, because every man is supposed to carry a gob in his room, and if he allows that gob to remain away back from his working place, 10 yards as I have seen in some instances, he must suffer in consequence.

5508. What is the height of the seam? Seven feet in Coolgardie, or perhaps it would be more correct to say that it has an average height of 6 feet.

5509. And you expect that gob 7 feet thick to be kept right up from the floor to the roof, and carried within a reasonable distance of the face? Yes.

5510. Have the men sufficient useless material to build up a gob properly? Yes, quite sufficient, unless they send it up in the wagons, and send it to Brisbane, as they sometimes do.

5511. What is the thickness of the band? The band in the Aberdare seam varies, but I think I should be safe in saying that it is between 8 and 9 inches thick on an average.

5512. Is that the only waste they have? Oh, no; a lot of boulders and soft muck come in occasionally.

5513. How often do you mean by "occasionally"? Of course they are not all across the face; they are perhaps a couple of yards apart, a little more sometimes.

5514. Do you leave your slack in the mine? We leave a little in No. 3 mine, but not a great deal.

5515. I am speaking of the Coolgardie mine particularly—do you leave any there? Yes.

5516. What percentage of slack is left in that mine? About 2 per cent.

5517. Do you think that 2 per cent. of the seam and 9 inches of useless material are sufficient to build up a gob 7 feet high, and carry it right up to the roof? If the men clean the coal properly and put the refuse in the gobs, there is abundance of material to do the work satisfactorily.

5518. I am not inclined to discredit your statement, but I do not see it? If you had raised that question when you visited the mine, I would have shown you that there is quite sufficient material for that purpose.

5519. Probably I shall look down the mine one of these days, but of course I believe what you say? You will be very welcome to go down.

5520. In the event of this gob not being kept up, and ventilation being required, what do you do? We use brattice cloth for the purpose of ventilating the face. In fact, all our levels are driven with brattice cloth.

5521. What is your system of working? The wicket system of South Wales.

5522. Do you mean by pillar and board or stall, or what? It is a modified system of double stall.

5523. I believe you leave pillars in? Yes, we leave pillars in. I will show you the plans. [*Plans produced and explained.*]

5524. Are the old borehole workings to the rise of your mine? Yes, the old borehole workings are all to the rise of our mine.

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5525. And the West Moreton workings, are they to the rise? They are to the rise of the major part of our workings.
5526. Are there any other collieries worked out to the rise of your workings? No, no other properties, except our own old workings which were worked in Mr. Thomas's time.
5527. Are the workings in the other collieries which have been worked out to the rise of your workings that have been stopped? Yes.
5528. How often do you bring up your workings on the plans just now produced? In the case of the one I first showed you, Mr. Atkinson completed the survey last week. The other is considerably older in consequence of Mr. Atkinson having accepted a Government appointment, and he could not complete the work.
5529. What do you mean by "considerably older"? About six months older.
5530. The Act of Parliament says that the workings must be brought up every three months? I believe it does.
5531. Do you apprehend danger from the old workings to which allusion has been made, and which are now filled with water? There is danger if we work near them. We do not apprehend danger from the place at which we have stopped. As soon as we see the water beginning to issue in anything like quantity we stop working at that place.
5532. The part in which you apprehend danger is not now working? No.
5533. Now, near to where you consider there is water, have you any places going? We have one place going, but I do not think there is the slightest danger. There is a little indication of water on the lower side of the room.
5534. In the places near where the water is do you make borings? We have never had occasion to use bores, but we have the rods in case we require to use them.
5535. Is there any definite and distinct plan of the Ipswich coalfields showing the mines that have been worked out, and the minerals that remain to be excavated? As far as I am able to say, I do not think there is.
5536. Seeing that you leave pillars in from time to time, is there any regulation length to the pillars? As I have said, our system of working is known as the "wicket system" of North Wales—we take out two-thirds and leave one-third. Our cut-throughs are 30 or 40 yards apart.
5537. Then how do you get the ventilation up to those 30 or 40 yards before you cut through? It is carried up by the gob.
5538. And have there been many complaints with reference to the ventilation? There are complaints in the summer time sometimes, but in the winter time everyone is satisfied.
5539. How many mines have you going in connection with the Aberdare workings? Two mines—No. 2 and No. 3.
5540. How many men are in No. 2? There are 186 all told working Aberdare—top and bottom.
5541. In the mine we were in, how many men are employed? One hundred and three altogether down below.
5542. Are these men working in different parts, or are they fairly concentrated? They are working in different sections.
5543. And in these different sections how is the air conveyed? The rise workings are the best ventilated. Then there is a travelling main airway leading into Ferret's property which gives them a fresh supply. Then the air goes into the dip, and is split again, and the dip is ventilated again by two sections of splits.
5544. Would there be any means of splitting that air in the first instance so that it would not go into the dip, but would go direct to the men without going round the workings at all? I do not see how we could manage to do that without driving airways straight from the extreme end of the workings to connect with the downcast shaft, and then give each man his respective quantity direct from the intake.
5545. At any rate, each section of the mine gets a supply of comparatively speaking fresh air? Yes.
5546. And I think you said there were so many thousand cubic feet of air travelling? Twenty-six thousand.
5547. How often do you measure the air? Not very frequently. The last time it was measured before yesterday was when Mr. Fryar was through, and I asked him to put his anemometer into the intake. I am pleased to say that when we measured it yesterday it was greater than when Mr. Fryar went through. On that occasion there were 13,000 cubic feet going into the dip workings, and yesterday there were 16,000 feet.
5548. You have no system of measuring your air regularly? We have an instrument for measuring it, and when we think it advisable we measure it if we have any doubt.
5549. When you measure the air do you make any record of your observations? Not usually, but I have given the inspector instructions that in future the measurement is to be entered in a book.
5550. I suppose you know that it is the law in Great Britain and in New South Wales that the air must be measured every month, and recorded? I believe so, but we are a long way behind those places.
5551. You said the mine is examined each morning? Yes.
5552. Is there some particular place where the men are located to await the report of the examiner? Yes. In the No. 3 shaft the examiner goes down at 4 o'clock, and the men do not attempt to go down the pit until he bells for them to go down. Any information he has to communicate to them he communicates. In No. 2 pit we have boards put up right across the road. On one side we have printed in large letters, "Safe," and on the other side "Danger." When the inspector goes in he is supposed to set the board at "Danger," so that the men know they may go no further. When he finishes his work he reverses the board and shows "Safe."
5553. You say the persons appointed to do this examination work are competent men? Thoroughly competent men, I believe.
5554. What test do they go through? The gentleman in charge of No. 3 has been a fireman in North Wales, and has had considerable experience. The other gentleman, at No. 2, is Andrew Hamilton. He has not had a great deal of practical experience, but he has had sufficient, and is well qualified for the position which he occupies.
5555. Does the manager or underground manager hold a certificate? No.

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5556. You have no certificated manager at all? Not at the present time. We have had certificated managers.

5557. When the examination is made, is there any rule that some distinct mark must be made on the places to indicate to the miners that they have been examined? Yes; the inspectors are supposed to mark the day of the month in the working places every morning. They write it with chalk on the face.

5558. Is there sufficient time given to these men to examine the mine thoroughly? I believe so. The arrangement is that they should go down very early in the morning to enable them to make a thorough examination, and the examiners are allowed to knock off every day at dinner time.

5559. So that they are not specially employed as roadsmen or firemen? After they have finished their examination they go to work.

5560. Are they simply colliers? They are specially appointed for this work of examination.

5561. And the time occupied in examination is deducted from their daily work? They are employed as special servants of the company. They examine the workings in the morning, and they report the condition of the mine in the report books. Then they work as ordinary day men during the rest of the day until dinner time, when they knock off.

5562. Have you those report books with you? Yes. [*Report Books produced.*]

5563. Are they kept in some accessible place in the mine, where the workmen can see them if they feel disposed? We have a little cabin fitted up at the bottom of the shaft with a writing-desk and books, and in those books the inspectors enter their reports. There is a lock and key attached to the door, and anyone wishing to see the inspector's reports can do so at any time by giving notice.

5564. Does the manager make a weekly report? I believe so.

5565. Does he keep a book? Yes.

5566. Accessible as well? Yes.

5567. Do you keep a book at the mine for the Inspector of Mines, so that he may enter his reports in it, and is that report book accessible to the men? We have a book in which the Inspector of Mines records the results of his examination every time he comes, and as I said before his reports are read at the next meeting of the board, and are available for anyone who likes to examine them, but, unfortunately, people never seem to take advantage of these privileges.

5568. Has it ever occurred to you, or has it ever been mentioned at any of your meetings, that a small contribution should be paid by each man from his wages to pay two men, or one man, to examine the mine once a month, which would certainly be a comparative trifle, and not by any means oppressive? Oh, yes, it has occurred to me on several occasions that something of the kind might be desirable, but it has never been done.

5569. Do you not think that in the absence of this periodical inspection on the part of the men, the managers may be a little lax in the performance of their duties, and that if it were known that such an inspection took place the managers would be more vigilant in the execution of their duties? I am sure that would not make any difference in Aberdare, because the managers are supposed to go through the place and make an examination quite independent of the inspection made by the man in the morning.

5570. As a practical miner do you think the inspection of the mine in the morning with a naked light is a sufficient, safe, and satisfactory inspection? I think the inspection of such collieries as I have seen with a naked light is perfectly correct, because you can make an inspection with a naked light much quicker and far more satisfactorily than you can with a safety lamp, but I am of opinion that old workings should be examined with a safety lamp.

5571. Have you a safety lamp at your mine? We have two, and we have ordered four more from Newcastle.

5572. Have you ordered Davy lamps? We have ordered the best lamps that can be got—the Morgan, or the Hipplewhite Gray, or any of those lamps that are supposed to be good.

5573. Have you taken out pillars yourself? Yes, I have had considerable experience in taking out pillars.

5574. In doing so, have you ever discovered any gas? No.

5575. I suppose you will admit that no colliery in the world can be said to be absolutely free from giving off explosive gas? I do not think it can be said for certain that there is any colliery which is absolutely free from gas, but during the course of my experience and my reading on mining matters I have known and read of many mines in which gas has never been known to exist.

5576. In your mine, at any rate, you do not think it is desirable to examine the working places with a safety lamp? Not in an ordinary way, but it would be well to do that in the old workings.

5577. Supposing your inspector goes down the mine to-morrow morning with a naked light and goes with a good deal of confidence never having seen gas there, and he finds gas there, don't you think that would be rather a risky business? It is risky, certainly, but a man who has had practical experience will know at once if he has got into gas, unless he rushes headlong into the place, because the light will show it.

5578. Supposing you yourself were to examine the mine? I should not be the least afraid to examine any of those mines with a naked light, but, of course, in mines known to give off gas in large quantities I would not make the examination with a naked light.

5579. You think you would be able to detect gas if it was there in any large volume? Yes.

5580. If gas was there in a large volume do you think it would be safe to examine the mine with a naked light? If gas were known to be there in large quantities it would not be safe.

5581. But if gas was never known to be there? Then I do not think a safety lamp would be necessary. If there were the slightest indications of gas I should like to see safety lamps used in the inspection.

5582. What is your objection to the safety lamp? The great objection is that you cannot see well enough with it.

5583. You can see very well with a Clanny lamp, and the light of the latest improved lamps is good and safe, even if you strike a great volume of gas? I believe it is.

5584. In that case what is your objection to using a safety lamp in the morning? I have examined some of the Aberdare old workings with a Clanny, but you cannot get half the light from it that you can from a naked light. In a mine known to contain explosive gas I am of opinion that it would be very desirable to use safety lamps in extracting the pillars, because we always take out the far away pillar first, and the

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old workings get filled up with whatever gas there may be. When we take the pillars out we take out as many of the props as we can for the purpose of taking the crush off the outside pillars, with the result that the roof has come down with terrific force, and many a time I have been left in the dark, and in such a case the tendency would be for the gas to be forced out on to the people outside, and there would be a chance of an explosion taking place.

5585. But supposing the mine contained only a small quantity of gas in the whole workings? Even then, I think the safety lamp should be used.

5586. You think that if there was gas in old workings, and falls should take place when removing the pillars, the concussion of those falls would force out the gas to where the men are working? In that case it would.

WILLIAM LEIGH, manager of Aberdare Colliery, No. 3 Mine, examined:

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5587. *By the Chairman:* Are you the manager of the Aberdare Colliery, No. 3 Mine? Yes.

5588. How long have you held that position? I was appointed and took up my duties on the 21st of December last.

5589. Were you engaged in the Aberdare Colliery before that? Yes, I have been engaged most of my time in this pit. I have been in it most of my time since it was sunk, except about three or four months when I was managing three years ago.

5590. How long is it since this pit was sunk? Something over six years.

5591. How long have you been engaged in coal-mining in the Ipswich district? I started in April, 1875, at Goodna.

5592. That would be about twenty-six years? Yes. I was away for two years in the Torbanlea Colliery, in the Burrum district.

5593. Had you any experience in the old country prior to that? No, not in coal-mining. I worked in a mine there for about four years, but not at coal-cutting.

5594. Then your chief experience in coal-mining has been in this colony? Yes.

5595. Have you seen any gas in the Aberdare Colliery? No; not inflammable gas.

5596. None at all? None at all.

5597. In any of the other mines in the Ipswich district in which you have worked have you seen any gas? I worked in the Waterstown Colliery about twenty-two years ago.

5598. Did you see any gas there? Yes; I believe that George Phie and I were the first who saw gas there.

5599. Was it there in any quantity? It was there in large quantities.

5600. Did any accident occur while you were there? One man, Richard Bassitt, was severely burnt.

5601. You say that was twenty-two years ago? Yes, it is twenty-two years ago, but I cannot say what month; probably it was about this time of the year.

5602. Is that the only place where you have seen gas in the Ipswich district? That is the only place. I worked some days at the old Tivoli before that, but I never saw any gas there.

5603. Your mine is examined in the morning before the men enter? Yes.

5604. Who does that? William Morris.

5605. Is he employed for that sole purpose? That is part of his duty. He occupies the rest of his time in general work.

5606. Do the men who are working on the coal remain at the surface until the examination is made? No, at the bottom. The pit bottomer receives information that everything is right, and then the men are allowed to go in.

5607. Is the examination made with a safety lamp? No.

5608. Do you think it is necessary that a safety lamp should be used when conducting such an examination? If there was any suspicion of gas it should be, but if no gas had been seen I should not advise it, especially in a high seam like Aberdare.

5609. You think that on account of the bad light given by a safety lamp, other dangers might be overlooked? Yes, the safety giving such a poor light, and the places being so high, I do not think it advisable or necessary to use a safety lamp.

5610. Is the examiner called the deputy or fireman? No, we call him the inspector.

5611. He enters his report in a book? Yes, which is kept at the bottom of the pit. Of course in the morning, if I do not see him, I look at the book to see what entries he has made.

5612. How often do you make reports yourself? There is one report that goes fortnightly to the directors, and there is a weekly report of any little things that might occur.

5613. And that report is entered in the book? Yes, but the fortnightly report is the fullest. It shows the state of the workings.

5614. With reference to the ventilation, your winding shaft is your upcast, is it not? Yes.

5615. Do you think that that should be altered? It could not be altered unless the steam was done away with and compressed air used instead.

5616. Not by any other means? It would be a difficult job. Of course it could be done. If you had a fan on the other shaft to draw the air it could be done; but I do not think it would be a benefit, because the heated air would go through the workings.

5617. How far is No. 1 shaft from the one you are working? Between 400 and 500 yards.

5618. And the heated air would have to travel all through the workings? Yes.

5619. But would not that heated air be very much diluted by the fresh air coming down? The heated air would still be going through the workings.

5620. Then you think the present arrangement—to have the working shaft the upcast—the best? It is the best under present circumstances. If we had compressed air to drive the pumps it would improve things to have that shaft the downcast.

5621. Could not the steam pipes be partitioned off without great expense? The shaft is not very large, and I do not think that would be workable.

5622. And you see no way of altering it? There is no way of altering it unless we drive the pumps with compressed air. We must keep the pumps going, owing to the quantity of water in the mine.

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5623. What would it cost to put up a compressed air plant? The only thing wanted would be a compresser and a boiler to hold the air.
5624. How much would the plant cost? I do not think it could be done under £1,000.
5625. Do you think it could be done for that? Well, it might be done for that. I have not gone into the thing in sufficient detail. Of course, the same pipes and pumps that we have would do for the compressed air.
5626. And do you not think that would be worth doing? Oh, yes; it would make things more comfortable for everyone.
5627. How many men are working in the hot portion of the mine—near the shaft and main dip? About five.
5628. They are employed there continually? Mostly.
5629. Is the ventilation otherwise good? Yes, in other parts of the mine it is good.
5630. You have received no complaints from the men as to the ventilation of the other parts? Yes, I have received complaints down the dip, but we have made a split in the air and improved things. We have also done that at the crosscut, and I have had no complaints for several weeks.
5631. When complaints are made do you do your best to rectify the grievances? Yes, we do the best we can.
5632. How many sections are there ventilated separately? Three.
5633. There are 103 men in the pit? On Friday there were 104.
5634. *By Mr. Glassey:* You say you were appointed to your present position in December last? Yes, it was on the 21st that I took up my duties.
5635. Had you held any official position at that mine before December last? Yes, I was manager at No. 3 pit about three years ago.
5636. Since the workmen took over the colliery? Yes.
5637. How long did you hold that position? Not quite four months.
5638. You say you make an examination fortnightly? No; report to the directors fortnightly.
5639. How often did you examine the mine? Before the inspector was appointed I examined it more often than I do now.
5640. How often do you examine it now? At least twice a week. There are some places to which I would pay more attention than others.
5641. Do you confine your inspection to the underground workings? No, all parts of the mine are examined—underground, the shafts, and pumps. The pumps, as a rule, are not examined more often than once a week.
5642. Do you make an examination of the pulleys and ropes, pit head frame, tackle, and shaft, and cages, once a week? I make an examination of the shaft and cages and ropes. The blacksmith generally goes to the wheels. I have been up there occasionally, but I am not at home up there.
5643. How do you examine the ropes? By letting them run through my hands. There are two kinds of examination. One is a very careful one. The rope is scraped and cleaned, and examined very carefully.
5644. How often does that take place? About once a month.
5645. Do all the men come out every night, or do some work over night? At the present time we have the dip working, and there are two men and a lad down at night, with the exception of the pump man.
5646. Is there ever any period when the mine is completely free of men at night? The only time is after 6 o'clock on Saturday afternoon until Sunday night at 1 o'clock. The shift leaves off at 6 o'clock, or between 6 and 7, and the next shift comes on then.
5647. Do you do any haulage at night? Yes.
5648. How often do you do that—every night? Yes, every night when the dip is working, but when the dip is not working the dip engine is not working.
5649. Are the cages going up and down at night? We do not draw any coal at night.
5650. What is your system in the morning—Before any men go down, do you lower any empty cages to see that the shaft is clear? When the pit men change shifts the cage is lowered.
5651. Have you any system whereby there are so many cages lowered and raised every morning before any man descends the shaft? No; the cage is only lowered when the pitman is going down.
5652. You do not do any haulage at night? We have the pumpman at work, and he must necessarily pump for two hours. The one pumpman leaves off at 5 o'clock in the morning, and the other pumpman goes on at 7.
5653. *By Mr. Thomas:* Do you draw water during the night? Yes; three or four nights a week.
5654. *By Mr. Glassey:* You draw your water up in tubs? In water wagons. As a rule we draw water on Tuesday night and Sunday night, and sometimes on Thursday night and Friday night.
5655. You create the current in your mine by exhaust steam? Yes, by steam pipes.
5656. Do those steam pipes go on Saturday nights and Sundays? Yes; they are always going unless something happens in the shaft, when they are shut off occasionally.
5657. Does that remark apply to holidays? Not as a rule. I don't think there has been a holiday since I have been on the staff.
5658. What I want to get at is this: Is there any cessation of the means of creating a current during Sundays and holidays, or is the current always created? The steam is always on, unless something occurs in the shaft to cause it to be shut off.
5659. So that your artificial means of ventilation is always going? Yes.
5660. Do you make a record in a book of your examinations of the mine? Mostly.
5661. What do you mean by "mostly"? I have not entered them in detail, but the fortnightly and weekly reports have been entered.
5662. Do you do that every time you make an examination? I have not entered a report in detail of my test of the ropes and examination of the shaft.
5663. Are you aware whether there is any fund at your mine, contributed to by the men, for the purpose of making payment to persons who may receive injuries while working in the mine, or for payment of compensation to the dependents of persons who may be killed by an accident in the mine? No, we have no such fund belonging to the mine, but there is an accident fund in the district.
5664. But you have no fund at the colliery for that specific purpose? No.

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5665. Do you keep a supply of splints, bandages, and medical comforts for use in the event of an accident occurring in your mine? Yes, we keep them at the office, and there is a stretcher close to the work.
5666. Do you as manager ever accompany the examiner or inspector in the morning to see him at his work? I have only accompanied him once since he has been on, but if I had any doubts about anything or thought that anything was wrong I should accompany him. I have every confidence in the present inspector. Before the present system of inspection was instituted I made the examination myself, and I know how long it takes.
5667. *By the Chairman:* How long has this inspector been on? He resumed his duties on the 1st of May this year.
5668. Was there any inspector before that? No. I did the inspection on several occasions.
5669. *By Mr. Glassey:* Did you make any record of your inspections? Not a full record, and I only made that for my own satisfaction.
5670. Have you had complaints from the men working under you with regard to the ventilation being deficient at any time? Yes.
5671. How often have you had such complaints? On two or three occasions.
5672. Since December last? Yes. On one occasion I had some doors put up down in the dip, and also down in the crosscut, and the ventilation is more satisfactory now. I have not heard any complaints for the last two months, I suppose.
5673. How many men were working in that particular section when the complaints were made? There are nine men in that place; but in that section there are eleven men working below.
5674. A short distance off? Yes.
5675. That is twenty men altogether? Yes.
5676. Where those twenty men are working, have you got a fresh supply of air for every section? Have you got a split? Yes, we have a split that goes into the bottom level and into the crosscut, and it was by the men in the crosscut that the complaint was made.
5677. In your splits how do you regulate the quantity of air going to each section? In some places we shut it off.
5678. Have you regulating doors erected? Yes, we have a regulator at the bottom level; that is where the air is regulated. There is also one in the dip.
5679. Have you any system by which you measure the quantity of air circulating in any section? Have you any means of distributing the air equitably according to the number of men employed in the different sections? We have not taken the number of cubic feet of air travelling to the different sections; we use our own judgment on that matter.
5680. Don't you think it is desirable to have some system whereby you can distribute the air equitably to the different sections of the mine in proportion to the number of men employed? Oh, yes.
5681. What is the difficulty in the way of doing that? I do not see any difficulty at all.
5682. I would suggest to you to do that in future? Yes, I will see that it is done in future.
5683. Is the expense of purchasing an anemometer to measure the ventilation such that the Aberdare Mine cannot have one? We have one.
5684. When you make your measurements by the anemometer, do you record the quantity of air circulating in the mine? I may say that we took it yesterday, and that is recorded.
5685. When did you take it before that? I do not think it has been taken before that. I believe it was taken when Mr. Fryar was there on one occasion, but it has not been the rule to take it.
5686. *By Mr. Rankin:* You say you test your wire ropes; you don't "test" them, you examine them? We examine the ropes.
5687. I suppose you would occasionally give them a more particular examination than at other times. Have you a machine for cleaning them, or do you clean them with a scraper or by hand? We have a machine that was used at one place, but it has not been used at No. 3 mine; we use the ordinary scraper there.
5688. Don't you think a machine is an improvement? Well, it is an improvement, but we have so much water at No. 3 mine.
5689. There is not much grease on the rope; it is all washed off, I expect? No, it is not all washed off; if we cleaned it all off there might be no hold for the grease when we put it on again.
5690. *By Mr. Glassey:* Do you use safety hooks? Yes.
5691. At all your mines? Yes.
5692. *By the Chairman:* If the inspector makes a report that anything is deficient, whose duty is it to see that his recommendation in regard to that matter is carried out? It is my duty to do that.
5693. The only such entry I see in your report book is one dated 10th May, where you say, "All in good working order, except a piece of badly broken roof in W. Edmonds's room No. 3 level, which needs special attention." Then on 19th May you report, "In good working order; the broken roof referred to on the 10th in W. Edmonds's room has been attended to." Was that broken roof left from the 10th to the 19th of May before being attended to? No, it was not completed till then. The roof fell into the room, and the roadway had to be timbered, and we had to bring a piece along to catch the edge of it, and it was completed then.

WILLIAM MORRIS, miner, examined:

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5694. *By the Chairman:* Are you employed in the Aberdare Colliery? Yes.
5695. What as? Inspector.
5696. How long have you been inspector? Since the beginning of the month.
5697. Were you working in Aberdare before that? Yes.
5698. For how long? Very nearly twelve years.
5699. And how long in this district? I commenced there shortly after I came to the country.
5700. Had you any experience of coal-mining in the old country? Yes.
5701. Which part? Monmouthshire.
5702. Have you ever seen any inflammable gas since you have been in this district? No.
5703. Have you ever had any reported to you? No, I have not.
5704. Is it your duty to examine the workings in the morning? Yes.

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5705. Do you enter your reports in a book every day? Yes.
5706. *By Mr. Glassey:* When in Monmouthshire how long were you employed in the mines? I have been working in the mines altogether for thirty-five years. Take twelve years off that, and that will leave twenty-three, but I was not all the time in Monmouthshire.
5707. During the time you were employed in Monmouthshire did you ever work in a fiery or gassy mine? Yes, I have held the position of fireman and night overman. I had charge of a district at night.
5708. The mine was divided into so many districts, and you had charge as fireman of one of the districts? Yes.
5709. Were there many men employed in that mine? About 500.
5710. Do you examine the Aberdare mine in the morning with a naked light? Yes.
5711. And you have never seen any gas at all? No, never.
5712. Do you think that is a safe method of examining the mine? It is safe in a mine where there is no gas.
5713. But you might never have seen gas in it, and might see it to-morrow morning? You might, and you might not.
5714. Supposing you met it there in a reasonable quantity? If I found it in any large quantity it would very likely find me.
5715. Do you think it is wise to run such a risk? There is this in it: that if you examine the mine with a safety lamp you keep yourself free from the risk of getting into gas.
5716. As a practical miner, notwithstanding that gas has not been seen previously in the mine, do you think it is a safe thing to examine in the morning with a naked light? That is a question I can hardly answer because there has been nothing of the sort found there yet. What we have had there previously is black damp.
5717. Do you have much of that? I have seen plenty of that after falls have taken place, but in the working places I have never seen any. When I have been working in close places I have tried to find if I could get a cap on the light, but it is not a close place where there is any ventilation. Suppose I have been driving a narrow place up to the rise, or cutting through, I have tried for my own information, and never discovered gas.
5718. I want from you a decided opinion. Do you think it is perfectly safe to examine the mine in the morning with a naked light? Oh, I think so.
5719. What time do you go down? Four o'clock.
5720. And the men? Seven.
5721. Are you the only examiner? In No. 3 shaft.
5722. Have you sufficient time in which to conduct your examination? Yes; I can do it in three hours.
5723. What mark do you leave in the various places? The day of the month.
5724. And your initials? No; I have adopted the same system as was in force in the old country.

THOMAS WOOLLEY, mining manager, examined:

T. Woolley. 22 May, 1900.

5725. *By the Chairman:* Are you the manager of the New Swanbank Colliery? I am.
5726. How long have you held that position? Three and a-half years.
5727. How long have you been in the Ipswich district altogether? Four years last April.
5728. Before that where were you employed? In New South Wales.
5729. What experience had you there? I was there for ten and a-half years.
5730. As manager? No; as mechanical engineer.
5731. Connected with coal-mines? Yes.
5732. Have you, since you have been at the New Swanbank Colliery, seen any inflammable gas? No.
5733. None at all? None at all.
5734. Have you ever had the occurrence of gas reported to you? As far as I can ascertain none has ever been seen in the mine—not the least bit of it.
5735. What seam are you working there? It is a seam that has not been known previously—only in that special locality. It averages about 3 feet 8 inches. There is a bottom coal about 2 feet 10 inches, then there is about 4 inches of flint, and then about 6 inches of top coal.
5736. Under what system are you working? The pillar and room system.
5737. Have you ever had any experience of working long wall? Yes; plenty.
5738. Where was that? In the old country.
5739. Were you in the old country before coming to New South Wales? Yes; I left in 1883.
5740. What part of the old country? South Staffordshire.
5741. Had you experience of working long wall there? Yes; we worked all our seams there under the long wall system.
5742. Do you not think the seam you are working now would be better worked long wall? I hardly think so, on account of the steepness of the grade. It would be rather awkward.
5743. What is the grade? About 1 in 3 or perhaps 1 in 3 feet 6 inches, and another reason why I do not think it would be practicable to work it on long wall principle is that there would not be sufficient refuse to make up the gobs, and we would either have to leave pillars of coal or put chocks in to support the roof. I think the best way in which to win the coal is to work it on the principle of pillar and room.
5744. What size are your rooms and pillars? The rooms are 8 yards wide, and up on the rise we cut them off to 5 yards, but as we go down the dip we increase them to 7 yards because there is more strata on top of them.
5745. At what depth are you working this seam? One hundred and sixty-seven feet.
5746. Is the mine examined in the morning before the men enter? It is.
5747. Are the men kept on the surface until you receive a report? Yes, until the overman comes up with the report.
5748. Does he examine with a safety lamp, or with a naked light? A naked light.
5749. Does he enter his reports in a book? Yes, I have it here. [*Report Book produced.*]
5750. Does he put any mark on the working places to show that they have been examined? Only occasionally.

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5751. What does he put then? Just the date.
5752. Are the men allowed to go down before he makes a report? No, not until he comes to the surface.
5753. *By Mr. Fryar:* Had you experience of gas in the old country? Yes.
5754. And you know how to examine for gas? Yes.
5755. Have you ever tried to find any gas in the New Swanbank Colliery? Well, I have never tried to find any with a safety lamp, but I have never seen any trace of gas. I have never seen any blower.
5756. I ask you if you have ever tried to find any; I suppose you could easily detect it with a naked light if there was a small quantity? Yes.
5757. Have you ever tried to find even a small quantity with a naked light? No. Of course wherever I have gone about the workings I have carried a naked light, and put it about the roof and holes and cavities, but I have never seen any trace of gas.
5758. *By Mr. Rankin:* You have examined the roof with your light as you went along, but not for the purpose of discovering gas? Not particularly for gas; we never expected it.
5759. You never expected to find gas, and did not look for it? No; there has never been any trace of gas seen in the mine since it has been opened.
5760. And that is the reason you did not look for it? Quite so.
5761. You did not consider it necessary to look for gas? No.
5762. How is your ventilation produced? By a furnace, and I have a pair of hauling engines with an exhaust in the upcast shaft. I have also a double pump at the entrance of the upcast shaft which has an exhaust in the shaft.
5763. That acts as a steam jet? Yes.
5764. *By Mr. Glassey:* I think you said that you have been manager at the New Swanbank Colliery for three years? For three and a-half years.
5765. Do you hold a certificate? I do.
5766. Is that a certificate of competency or for service? For service.
5767. How long were you manager in the old country? I commenced in the year 1868, and I managed until I left in 1883.
5768. So that you were in the old country when the great Mining Act was passed in 1872? I was. Previous to that I had been acting as manager, or I would not have had a certificate for service.
5769. But in consequence of that you were entitled to it? Yes.
5770. Was that in South Staffordshire? Yes.
5771. Did you work in any gassy or fiery mines in South Staffordshire? I did.
5772. Did the men work there with safety lamps? With naked lights.
5773. How was the mine examined in the morning? That used to be done with a safety lamp. I am referring now to the old country.
5774. Did you ever take out any pillars when you were there? No, all our seams, with the exception of a 30 feet seam, were worked on the long wall principle, consequently there were no pillars to extract.
5775. Have you ever had any experience in taking out pillars? I have at Swanbank, where I am managing now.
5776. At any other place besides Swanbank? No.
5777. Not having seen any gas at the New Swanbank, you would not use safety lamps in taking out pillars? No. Where the roof has broken down I have been up to the top of the cavities, and have never seen any trace of explosive gas.
5778. Have you frequently examined the cavities created by falls in the New Swanbank where pillars have been removed? I have.
5779. And you have never discovered any explosive gas? Not the slightest trace.
5780. How many men have you employed in that colliery? An average of about 70.
5781. Do those men work in different sections of the mine, or are they fairly concentrated in one place? They are scattered all about the mine, some in one place and some in another.
5782. How do you convey the air to the different working places? It sweeps round the whole of the faces of the working places. It goes down the dip or incline plane where the Commission went down, right across another incline plane into the north level, and then comes back through a room and works back from there until it gets into the return airway and the upcast shaft.
5783. Do you mean to say that the air goes right round the whole of the working places from one man to another without being divided into splits? It does.
5784. Do you as a practical miner think that is a good system? For the number of men I have employed I do not think it is a bad one.
5785. How many men work in a room? A man and a lad generally.
5786. The seventy employees includes boys as well as men? Yes, it includes everyone.
5787. Then you would have thirty-five or forty places? No, I have about twelve men and lads who do day work, and there are also the boys who couple up, and the overman, so that I average only about twenty-five working places.
5788. Do you think that with those twenty-five working places the air is not considerably polluted or contaminated before it reaches the last section of men? It is to some extent, but still when it reaches the last working place the air is sufficiently pure to render the place harmless; in fact, you cannot detect any black damp or any other gas there.
5789. Are you troubled with black damp there at all? I have never seen black damp but once in the mine.
5790. Do the last section of men get vitiated or polluted air? It must be impregnated in some way, but not sufficiently to injuriously affect the workmen.
5791. Do you keep any horses down the mine? No.
5792. Where do the men stop until the report is made of the examination of the mine in the morning? The men stop on the top until the overman who has made the examination comes up.
5793. Does the overman act as roadsman or deputy? No, he is the underground overman.
5794. What time does he go down in the morning? At a quarter or half-past 4 o'clock.
5795. What time do the men and boys go down? They commence to go down at 7 o'clock.
5796. Has the overman sufficient time to examine the whole of the working places before the men enter? He has.
5797. When does he make his reports? Every morning.

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5798. Have you the report book here? Yes. [*Report Books produced.*]
5799. Have you any means of testing the capabilities of the man who acts as overman before you employ him in that position? I know his capabilities pretty well, because he happens to be my son, and as I have been managing collieries now for somewhere about thirty years, and he is about twenty-seven years of age, and has always been under my care and tuition, I think his capabilities are sufficient for the position he holds.
5800. Has he the ability to discover gas if it was there? As far as knowing whether gas would exist or not, I do not think he has had any experience, because when he left the old country in 1883 he was working a hauling engine, and had no experience down below, so that I do not think he is acquainted with explosive gas.
5801. Do you, as a practical miner and manager, think it is a wise thing to appoint a person who has had no knowledge of gas to examine the pit in the morning? With the tuition I have given him, I think he would have no difficulty in detecting explosive gas if it existed.
5802. Does he enter up his reports every day? Yes.
5803. How often do you as general manager make reports? Weekly.
5804. Of matters both above and below ground? Yes.
5805. Have you your report book here? Yes. [*Weekly Report Book produced.*]
5806. During the time you have been manager of the New Swanbank Colliery have the men ever availed themselves of the section of the Act which enables them to inspect the mine periodically? Never. They have never asked to be allowed to do so.
5807. Would you favour such an inspection? If the men requested it I should be only too pleased for them to inspect the mine, and I would accompany them.
5808. *By Mr. Fryar:* You have no power to prevent them doing it? No.
5809. *By Mr. Glassey:* I mean to say there is no feeling that if the men did such a thing it would reflect on the management? Not at all.
5810. Have you a supply of medicines, and bandages, and splints at your mine? I have.
5811. And stretchers as well? Yes, and a bottle of brandy, and a bottle of Fryar's balsam, sticking-plaster, lint, and splints.
5812. Is there any fund connected with your mine to meet cases of accident? No.
5813. No accident fund? No.
5814. No insurance fund? No.
5815. As manager, would you favour the establishment of a fund to which the employers should contribute their quota of, say, ½d. per ton? I am in favour of the men and masters contributing something equally in order to establish a fund.
5816. I think it is not unreasonable that the men should contribute something; but do you think ½d. a ton would be an excessive amount for the proprietors to pay? If they contributed ¼d. in the £1 it would enable a fund to accumulate in time which would meet all cases of accident.
5817. A farthing in the £1? Yes, a miner would average perhaps £10 per month. He would contribute 2½d., and that would be 2s. 6d. a year.
5818. Do you think ½d. per ton would be an oppressive amount for the proprietors to pay towards such a fund? I do not think, as far as my company is concerned, that they could afford to pay it. I do not think they are making profit sufficient to pay it.
5819. How often do you make up your plans? About every month.
5820. Do you do it yourself? Yes.
5821. Have you your plans here? Yes. [*Plans produced.*]
5822. What area of ground have you altogether? I suppose 1,500 or 2,000 acres.
5823. What seam is it that you are now working? It is a 3 feet 8 inch seam; but what the name is I do not know. I think it is something special in that locality.
5824. What area is worked out altogether? I have not scaled it—I should say about 15 or 20 acres.
5825. What is the extent of your main level? About 500 yards.
5826. Have you ever discovered black damp? On one occasion I saw a little, but there was no air travelling at the time.
5827. You are not subject to black damp? No.
5828. Does your furnace go night and day? They rake the fire at night.
5829. Do you do that on Saturday night? No, it goes out altogether.
5830. So that you actually have no means of creating a current from Saturday until Monday morning? We have to pump water every day, and the exhaust from the steam pump is always going, and creates ventilation.
5831. I think you said that the present examiner of the mine in the morning made a mark occasionally to show that he had examined the places? Only in some of the places.
5832. What guarantee have the men that that man has examined their places at all? Well, they have no guarantee, but still they have confidence in the man. There is one thing I may say. I have been there three and a-half years, and I only know of one accident that I had to report.
5833. He makes a mark occasionally, but not always? Of course it would occupy some time to mark every place, and he would not have time to examine so minutely as he does now. What I mean by marking occasionally is that only a few places are marked. I do not mean to say that he only marks once a week. He marks some places every morning, but not the whole of them.

SAMUEL CLARKSON, miner, examined:

S. Clarkson. 22 May, 1900.

5834. *By the Chairman:* What are you? A miner.
5835. Where are you working? At the New Swanbank Colliery.
5836. How long have you been working there? About nine months.
5837. How long have you worked in the Ipswich district? Twenty-two years.
5838. Had you any experience of coal-mining previous to that? Yes.
5839. Where was that? In Scotland.
5840. How long were you working at coal-mining in Scotland? Eight years.
5841. Since you have been in the New Swanbank Colliery, have you ever seen any inflammable gas there? No.

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5842. Have you seen any in this district at all? Yes, I have.
5843. In what mine? In the Waterstown Mine, in the Garden Tunnel.
5844. Was there any quantity there? No, not a great quantity.
5845. How long were you working there? About three years.
5846. Was there any accident there during that time from gas? Not while I was there, except that I was just a little burnt myself.
5847. How did that happen? From a blower of gas.
5848. Did the gas come off in any large quantity? No.
5849. Only a small amount? Just a small amount.
5850. Did it come off constantly? Yes, we were going in with a naked light, as we generally did. The place was double shifted, and our mates were just out, and generally when we met our mates we had a smoke. We smoked for ten minutes or thereabouts on that occasion, and then we went in. I was the first one in, and the gas went off.
5851. Then you think the place had not been left more than ten minutes? It would be more than that; allowing for the time our mates were coming out, it would be about twenty minutes.
5852. And did the gas accumulate in the meantime? Yes.
5853. What made you think it was a blower?—Did you hear the gas coming off? If it was not a blower it would not have been there.
5854. You mean that there would not have been time for it to accumulate if it had not come off rather suddenly? Yes.
5855. Were you much burnt? Not much. It brought the blood from me, but I attended to my work that day.
5856. The burn was not sufficiently serious to keep you from your work? No; I continued my work even on that shift.
5857. While you were there, was the gas ever lighted at any other time? Yes.
5858. Did it explode? No, it did not explode. I have lighted it myself in order to get it quickly out of the place where I was working.
5859. Did you ever hear of any other accident, or anybody else being burnt, during the time you were there? Before I went there, a man named Richard Bassitt was burnt.
5860. Was he badly burnt? Yes; I think he was pretty badly burnt, but that was before I went there.
5861. Have you ever met with any gas in any other mines in this district? No.
5862. Not in any of them? Not in any of them.
5863. Have you worked in many others? Yes; I have wrought in the Swanbank, Dinmore, and the New Chum, and the present place where I am working.
5864. And you have never seen gas in any of those mines? No; only in the Waterstown Mine.
5865. In which seam in the Waterstown Mine? In the Garden Tunnel; I really do not know what they call the seam.
5866. Was it the upper one? The one where the bore hole is.
5867. You say you have been working only about nine months in the New Swanbank? About that.
5868. Has the ventilation there been fairly good? Well, it is pretty good in certain parts of the workings.
5869. Is it bad in other parts? Where we are working is on a level, and we drive the level too quick to keep the rooms up and get air into it, and it is a little close there.
5870. Is the air actually bad there? No; not actually bad.
5871. And you say that, altogether, the ventilation is fairly good? Yes, considering.
5872. And you have never seen inflammable gas there? No.
5873. *By Mr. Rankin:* You say your level goes too quick for the rooms to follow it up. Do you keep the brattice into the face? Yes.
5874. I suppose if you asked for brattice cloth you could get it? Yes.
5875. Have you asked for it? Yes.
5876. And got it? Yes.
5877. There is no difficulty in getting brattice cloth to overcome that defect? Not the least.
5878. And don't you find that when you use the brattice cloth you have comparatively good air all round? You know as well as I do, Mr. Rankin, that when you get bratticing there is a good deal of air that escapes.
5879. *By Mr. Glassey:* You say you have been in this district about twenty-one years? About twenty-two years.
5880. And you have only been about nine months in the mine where you are now working? Yes.
5881. How long is it since you worked at Waterstown? Seventeen or eighteen years. It may be more; very nearly twenty years.
5882. How long did you work at Waterstown? About three years.
5883. During the three years you worked at Waterstown did you work in any seam but the one? No; only the one.
5884. That is what they call the Garden seam? Yes.
5885. Now, in that Garden seam, did you see gas frequently? Oh, yes. It was there from the very start of the level that we put in. It was blowing all the time, but not in sufficient quantity to cause an explosion.
5886. How long had that seam been worked before you went there? I could not say.
5887. Was it far in when you went? It was not in. The dip had just been driven, and the level was in about 30 yards.
5888. Did you commence in that level? Yes.
5889. Did you ever hear anyone saying that they had discovered gas in the dip? Yes.
5890. Frequently? Not frequently.
5891. In your level, and in other places where you worked, you have seen gas frequently? I only saw it in our level.
5892. How long did you continue to work in that level? I could not say exactly, but we drove the level a long distance.

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5893. Did you continue in it a year? About a year.
5894. During that year did you see gas almost daily or weekly? I saw it every day.
5895. So that when you left your room to have a bit of a smoke, and came back again, you naturally expected to find gas? Yes.
5896. Therefore, it was not a sudden outburst, but was a regular and frequent thing? Yes, a regular and frequent thing.
5897. Was Mr. Bassitt burnt while you were there? No, a good while before that.
5898. When you were there was the mine examined every morning before the men went in? Not to my knowledge.
5899. So that matters were simply allowed to drift? Exactly.
5900. On entering the mine in the morning, and finding gas there, was there any attempt on the part of the management to examine the mine and see if it was safe? Well, no. It is the general rule here that the sooner you go down and the more coal you get ready the more money you get at night. You always went there with the intention of finding gas in your place, and sometimes perhaps you might light it up or put your light back some distance from where you were working and wave it out with your shirt.
5901. Occasionally, when you thought gas might be there, you took some means of wafting it out? Yes.
5902. And when you went out to have a bit of a smoke with your mates and coming back again you would go through the same process? Just the same process.
5903. On leaving Waterstown where did you go? To Old Tivoli.
5904. Did you ever see any gas there? None.
5905. Did you ever hear of it? Never heard of it.
5906. From there where did you go? To the New Chum.
5907. In the New Chum did you ever discover any gas? Never.
5908. You never saw gas anywhere else but where you have mentioned? Never.
5909. What were you doing at Waterstown? Hewing coal.
5910. You have never been an examiner? I never have.
5911. In the mine in which you are now working do you discover, when you enter the mine in the morning, any mark to indicate that somebody has been there and has examined your place? No.
5912. No date? No.
5913. And no indication that someone has been there before you? No.
5914. Now, is there any place for you to stop while the mine is being examined? We stop on the pit bank.
5915. Until you are signalled down? Until the whistle blows at 7 o'clock.
5916. And there is a person down there examining before you go down? Yes.
5917. From your experience of gas in Waterstown and in Scotland do you think you would be safe in examining your place with a naked light? No; it would not be safe for a naked light to go in among gas.
5918. But do you think that in a mine where only a small quantity of gas has been seen or in any mine, that the examination should be conducted with a safety lamp or with a naked light? I think it ought to be examined with a safety lamp.
5919. In every case? In every case.
5920. Even in a pit where no gas has been seen? Well, even though there is no appearance of gas we do not know what might happen in the night. A fall might come away to a fault where a blower might be. That is the very place where you will find gas. I think it would be very dangerous for a man to go down there with a naked light for a thing he is expecting.
5921. Now, you are a practical miner, and you have never discovered gas in the mine where you are now working. Do you think the examination of the mine with a safety lamp is the proper method of examination? Yes, I do.
5922. Do you recommend that? Yes, I do.
5923. *By Mr. Thomas:* Would you recommend that in Swanbank?—You have never seen any gas there, and yet would you recommend that that mine be examined with a safety lamp? Yes, I would.
5924. *By Mr. Glassey:* Have you yourself, or the other men, complained of the ventilation being deficient? I have not.
5925. You have always had sufficient? Yes.
5926. Have any meetings or conferences of the men been held with regard to deficiency in the ventilation? Not that I know of.
5927. In Swanbank I am speaking of? No. If I ever wanted air I always went to the boss or manager and got what I required.
5928. You had no difficulty in getting it? Not the least.
5929. Now, in any of the other mines you have been working in have the men had occasion to meet from time to time with regard to deficient ventilation? Not to my knowledge.
5930. *By Mr. Rankin:* You say you are kept on the top till the whistle blows and then you go down? Yes.
5931. Before the whistle blows do you get any intimation from below that the place has been examined? No.
5932. Do you get any intimation at all to that effect? A gentleman gives that information.
5933. Does he tell you what it is? He does not tell us.
5934. Then how do you know that he has examined your place? I do not know.
5935. There is no date or mark put on the face to show that he has examined the place—he simply goes down and comes up, and the whistle blows, and then you go down? Yes.
5936. It is a curious thing for a man to examine a place and then to make no remarks to those who go below? It is.
5937. Would you recommend that the whole of the mines in which you have been employed should be examined every day with a safety lamp?—Do you think it is necessary where mines have been worked for years and years without any gas having been seen that they should be examined with a safety lamp? If gas is the thing they are looking for.
5938. Where a mine has been worked for years, and no gas has been seen in it, do you think it is necessary to examine it with a safety lamp? Well, even if there is nothing there it would be safer to examine it with a safety lamp.

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5939. But there are other things to be taken into consideration, especially where the roof is soft or bad. Do you think you can examine defects in the roof and defects in the road as well with a safety lamp as with a naked light? No.
5940. Don't you think the danger from such things would be very much greater than the danger from gas where gas has never been known to exist? You talk about a bad roof, but you know that where the roof is bad gas will come out.
5941. Not necessarily. All I want is your opinion as to whether you think it is necessary that all those mines in which you have worked in this district where gas has never been known to exist should be examined with a safety lamp in the morning? It's best to be on the safe side, is it not?
5942. Answer my question and tell me what you think? It is right enough to answer the question. If Mr. Ferrier had gone in———
5943. There was gas there. Just answer the question? Well, yes, I say it would be safer to have a safety lamp.
5944. You think they should have a safety lamp? Yes.
5945. *By Mr. Fryar:* At the New Swanbank Colliery you say the man comes up from the mine in the morning? Yes.
5946. Why does he come up? To give his report, I expect.
5947. To whom does he give his report? To his father, the manager of the mine, I expect.
5948. Have you any reason to expect that? Not the least.
5949. You do not know, then, the connection between that man coming up and the other men going down? No; I don't.
5950. He goes down some time before you? Yes.
5951. And then he comes up and you go down, and you do not know whether the one is the effect of the other—whether his coming up is the cause of your having to go down? We do not go down till the whistle blows.
5952. Exactly; but has the whistle blowing anything to do with that man coming up? Not that I know of.
5953. *By the Chairman:* Does the whistle blow for you to go down before he does come up? Yes.
5954. *By Mr. Fryar:* Do you see him before you go into your places? Yes.
5955. What does he tell you then? Nothing.
5956. Has there ever been a case where a place was reported to be unfit for a man to go into? Not at the New Swanbank, to my knowledge.
5957. Do you think it would be the duty of that man to tell you if the place was unfit to go into? Yes.
5958. And as there has never been any place reported unfit, he has never told you anything? He has never told us anything.
5959. Isn't it very peculiar that as there is no mark put in your places to show that they have been examined, he should not say anything to you about the matter? I think there should be a mark put on the faces, as I was accustomed to see done in the old country.
5960. Have you made any inquiries about the matter? No.
5961. *By Mr. Rankin:* Do you know whether that is done in any of the other collieries in this district? I expect they are all the same as this.
5962. You don't know whether the date is marked in any of the other mines? No.
5963. *By Mr. Glassey:* Where were you working before you went to the New Swanbank? At Tivoli.
5964. Was there any mark made at your place there to show that it had been examined? No.
5965. How long were you there? Two years.
5966. And during the whole of that time you never saw any mark to indicate that any person had examined your place in the morning? No.
5967. *By Mr. Fryar:* Did you see any gas there? No.
5968. Did you work near faults or troubles? Yes; it was composed of faults.
5969. Have you ever worked in Aberdare? Never.
5970. How long have you been in the district? Twenty-two years.
5971. And with the exception of that instance at the Garden Tunnel you have never seen any gas in this district? I never did.
5972. How long has the Garden Tunnel been stopped? I could not say, but I believe it is about sixteen years since it was stopped.
5973. *By Mr. Glassey:* Where you there when it was stopped? No.

JAMES HINDLEY, miner, examined:

J. Hindley. 22 May, 1900.

5974. *By the Chairman:* Are you a practical miner? Yes.
5975. Where are you working? At the New Swanbank Colliery.
5976. How long have you been working there? This last time I have been there only four weeks.
5977. Have you worked there before? Yes; about two years ago.
5978. How long have you been working in the Ipswich district? Since I landed in the district, and that is nineteen years next month.
5979. Have you worked in different coal-mines during that time? Yes; but out of that I was five and a-half years in New South Wales.
5980. Had you any experience in coal-mining in the old country previous to your coming to Queensland? Yes.
5981. For how long? About ten years.
5982. In which part of the old country? Durham.
5983. While working in Durham had you any experience of gas? Yes, I was in mines that had gas in.
5984. Were you ever in mines where you had to use a safety lamp? Yes.
5985. Then you have had considerable experience of gas? Yes.
5986. Have you ever seen or heard of any inflammable gas in the New Swanbank Colliery? No.
5987. Or in any other mines you have worked in in the Ipswich district? Not in the Ipswich district.
5988. Have you ever worked in any mines in Queensland in which there was inflammable gas? Not in Queensland.

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5989. Had you any experience of gas in New South Wales? Yes.
5990. How long did you work in the New Swanbank Colliery when you were there two years ago? About fifteen months.
5991. Were they working the same seam then as they are working now? Yes.
5992. Has the ventilation in the New Swanbank mine been good? There are some places in which it is very good, but in other places it might be better than it is.
5993. Are you speaking of a particular part of the mine, or of particular working places? Of working places.
5994. By what means do you think it could be made better in those places? I think if the bratticing was drawn nearer to the men it would be better than it is at present.
5995. If the men make any complaint that the ventilation in their working places is not good can they get brattice if they ask for it? I have never heard of any case of that kind.
5996. Have you ever asked for it? No, I would not like to ask.
5997. Do you think there would be any difficulty in getting bratticing if you were working in a place where it was required? I could not say whether it would be allowed.
5998. I suppose if the ventilation was really very bad you would ask for bratticing? I would not altogether say whether I would ask for it, because there have been cases in this district where it has not been advantageous to mention too much, otherwise the condition of things would be different.
5999. Do you mean that the condition of the mines would be different? Yes.
6000. In any of the mines you have worked in, except the New Swanbank, has any obstacle been put in the way of men complaining getting what they desired, or have men complaining been looked upon as marked men, and been dismissed? Well, that has been done.
6001. In what cases has that been done? At one time men were dismissed, but not on ventilation matters.
6002. What matters were they for which the men were dismissed? Political matters, and that shows you that a man dare not go to extremes in asking for anything, or else he may be dismissed.
6003. Am I to understand from what you say that men are afraid to make a reasonable complaint if there is anything wrong? Is that what you mean? Yes, that is what I mean.
6004. Have you found that in the mine generally or only in one particular mine—do you refer to Swanbank particularly? No; I am not going to say that has been the case at Swanbank.
6005. That has not been the case at Swanbank? Not to my knowledge.
6006. And I suppose you have an objection to saying what mine it has been the case in? I have a strong objection.
6007. I want to know whether that is the general feeling among the men, because you have made a rather broad statement. You say that, generally, in this district men would be afraid to make any proper complaint they might have? As far as the mine is concerned it is different.
6008. I asked you, if you had not sufficient ventilation in your working place would you feel afraid to go and ask the manager to improve the ventilation? I cannot say that I would be afraid to ask him.
6009. Would you think that you would be likely to suffer in any way? That is another matter. I would not be afraid to ask for it, but it might have resulted in some other way afterwards.
6010. Do you think it would influence the manager against you;—that is what you have really said? If you thought your place was not well ventilated, and asked for brattice, would that influence the manager against you? I would not say whether it would or not.
6011. You distinctly said a little while ago that it would? Not in reference to mining matters, but in connection with other things.
6012. I asked you particularly in reference to mining matters: we have nothing to do with political matters. It was simply ventilation that I was referring to, and you said that you thought the manager would be influenced against you. Would that be the case? As far as bratticing is concerned, it has not been the custom to have it. You might get it and you might not.
6013. I asked whether you thought the management might have a down upon you if you asked for brattice, and you distinctly said yes. Is that the case? I am not going to give an answer as to whether he would place a black mark against me.
6014. But do you think the mere fact of asking would influence the manager against you? I would not like to say whether it would or not.
6015. You must know? No, I cannot say.
6016. Have you any reason to believe that it would? No, I have no reason to believe that it would.
6017. And you have never asked for anything of the sort? No, I have never done so.
6018. *By Mr. Glassey:* You say you have only been one month at Swanbank? Four weeks.
6019. And about two years ago you were there? Yes.
6020. Two years ago was the ventilation very good? I must say it was better then than it is at the present time; that is, in some parts. Of course it is very good in other places.
6021. As far as your experience goes what is the ordinary distance men work in driving a room before cutting through? It never varies that I am aware of.
6022. What is the distance? You drive your room, and then you go on until such time as you have cut a hole through.
6023. Suppose you went a distance of 30 or 40 yards what means would be adopted for carrying the ventilation? The ventilation, as far as I have seen, is provided by putting a hole through from one room to another.
6024. At what distance apart? I have never seen any distance measured out. Sometimes they go further than at other times.
6025. It is merely done on the order of the manager? Yes.
6026. There is no specific distance that a place has to go before a cut through is made? I have never seen any—not in Queensland.
6027. So that you must go on for 60 yards without sufficient air? Just so.
6028. And if you could only go 20 yards they would make a cut, but they wait until the necessity of the men compels them to make a cut? That is it. There is no rule. In New South Wales they have a regular system. The distance there is 35 yards.

6029. What other mines have you been working in in this district? At the New Chum.
6030. For how long? This last time about nine months before going to Swanbank.
6031. What was the ventilation like there? In the tunnel where I was working it was not bad.
6032. Before you went there, where were you working? I was at Lindsay's.
6033. What was the ventilation like? It was very fair.
6034 In all these places where you have been, do you know whether the mine was examined in the morning before the men entered? I have never known that any mine was examined in the morning until just before leaving the New Chum.
6035. About four weeks ago? Yes.
6036. Do you think the announcement of the Commission coming into the district had anything to do with the little extra vigilance shown in regard to morning examination of the mines? I could not say.
6037. In the county of Durham where did you work? Oganshaw.
6038. Where is that? About a mile out of Wellington. It is about 7 miles away from Durham.
6039. Did you work at any other mine there? Yes, my next pit was Kella.
6040. At both of those mines had you any experience of fire damp? I had a little experience at Oganshaw, but very slight, and I had some experience when at Kella.
6041. Do you think you could discern fire damp if you discovered it in this district? Yes.
6042. What is your opinion in reference to examining all mines with a safety lamp, irrespective of whether gas has been previously found in them or not? Well, I really think they ought to be compelled to examine the mines before the men go into them.
6043. With a safety lamp? Where there is gas of course they should be examined with a safety lamp, but where there is no gas, then I think a naked light should be sufficient.
6044. *By Mr. Thomas:* When you go into your room, even supposing somebody had been there before and had examined it, would you rather trust that man's opinion than your own? No, I always prefer my own opinion.
6045. You would not depend upon the report of the examiner? Yes, if the man is qualified. He ought to be a qualified man before he examines any place.
6046. Provided the examiner is properly qualified, would you go to work without undertaking an examination for yourself? I would take his word for it if he was a qualified man.
6047. Without any examination of the workings yourself? If he is a qualified man and has examined the place, I am quite prepared to go to that place the next morning.
6048. But you would not go to work without seeing for yourself whether the place was safe? Not as far as gas was concerned.
6049. I am not alluding particularly to gas. There are other things to contend against besides gas? Just so. Well, I may tell you that in Durham and in New South Wales they examine before the men go to work. Of course the examiners are experienced men. If a prop or a sprag is to be set, a mark is placed where it has to go. The day of the month is also marked on a man's shovel so that when he goes in he can see whether the place has been examined.
6050. I only want to point out that although the fireman might have examined a place, yet the miner usually likes to examine it for himself when he goes down? When I go into my place the first thing I do is to examine it and see if any roof has come away during the night.
6051. *By Mr. Rankin:* Supposing the rule was carried out rigidly that the places must be examined and marked safe before the miners entered, would you not examine the place yourself also? Yes, I would.
6052. Is it not your experience that the most experienced miners would always do the same? Yes, the reason why a practical man should always examine the places is that there are many cases in which a man may ride a race to-day and be alongside of you in the pit to-morrow.
6053. *By Mr. Glassey:* That is to say that men of no experience are liable to be sent to work with experienced men? Yes, and if you refuse to work with such men you can take your tools out and go.
6054. In the county of Durham, in England, and in Newcastle, in New South Wales, where the mines are fairly well managed, there is always a competent person to examine the mines before the men enter? Yes.
6055. And if, in examining the roof, they see that some prop is wanted they put a chalk mark there? Yes.
6056. And if a sprag is wanted in the coal they put a chalk mark there? Yes.
6057. And you would enter your place confidently after the examination? Yes.
6058. But even then you would "jowl" the place yourself, "jowl" the top and the sides? Yes.
6059. *By Mr. Fryar:* Isn't there gas in the mines in Durham and Newcastle to which you referred? I have never seen any gas in Newcastle. I only worked in the Glebe in New South Wales, and I never saw any gas there.
6060. But you saw plenty in Durham? I saw any amount in Durham. In fact, the one at Keller was called "The Magazine."
6061. You laid a good deal of stress just now on the phrase "qualified man"? Well, an experienced man.
6062. In whose judgment should the man be qualified? I think if a man has had between twenty and thirty years' experience in coal mines he ought to be a qualified man.
6063. That is not an answer to my question. In whose judgment should he be a qualified man? I may say that qualified men in the old country are put through a proper examination.
6064. Are deputies put through an examination? Now they are.
6065. Do they get certificates? I do not know of my own knowledge, but I had a brother who had two certificates, and if he had stayed a fortnight or three weeks longer he would have had a third certificate.
6066. What were his certificates for? I could not say.
6067. You cannot say whether any of them was a deputy's certificate? No. You see in each colliery there they rear up men for their own mines, and they give them certificates for that purpose.
6068. Who give those certificates? The companies who employ the men.
6069. Would not the very fact that a company or owner employed a man in their own places imply that they were satisfied that the man was capable? Yes.
6070. Then, in whose opinion should the man be qualified? Well, he should be qualified.

J. Hindley. 22 May, 1900.

6071. I have not heard of any deputies' certificates in the old country? There were no deputies' certificates when I came out nineteen years ago, but there may have been many things altered since then.
6072. The important point is that a man should be qualified. Isn't it fair to presume that if an owner employs a man to do a certain work, he considers that he is qualified to do that work? As far as some men are concerned, influence goes a long way whether they are qualified or not.
6073. Then what would you suggest to insure that they have proper qualifications? They should go through an examination.
6074. For the position of deputy? Yes.
6075. Would you go a little further and say that a man should go through an examination before he becomes a hewer? I am not saying that, but I can assure you that in New South Wales if a man who is not a miner goes on the coal he is fined £5.
6076. But surely a man would not be employed on the coal here without the knowledge of the owners? Oh, yes.

ROBERT LINDSAY, manager of West Moreton Colliery, examined:

R. Lindsay. 22 May, 1900.

6077. *By the Chairman:* Are you the manager of the West Moreton Colliery? Yes.
6078. How long have you been manager there? About six months.
6079. How long have you worked at coal-mining in the Ipswich district? Twenty-eight years.
6080. Had you any experience of coal-mining previous to that? None previous to that.
6081. Have you been all your time in the Ipswich district? Yes, with the exception of twelve months which I spent in Newcastle, in New South Wales, and three months that I worked at Burrum.
6082. How long have you been in the West Moreton Colliery altogether? Just the six months. I had worked in the old workings in the West Moreton, and was then roadsman.
6083. How long were you there? Two years.
6084. Have you ever seen any inflammable gas in any of the mines you have worked in in this district? I have not seen any fire damp.
6085. Not in any of the mines? No.
6086. Will you tell us some of the mines you have worked in here? I was about nine years in the Rossend mine, now called the Haighmore Colliery, and I was manager for three years at Braeside.
6087. How long have you been manager? It is eighteen years since I was first manager.
6088. Is the West Moreton Colliery examined before the men enter in the morning? Partly, owing to the nature of the work. The daymen clear up the shots fired at night before the men go to work in the morning, but they do not make it a rule to go into all the workings.
6089. Is there no man appointed to go round and to enter a report in a book daily? Yes, we have a daily report book. The day men are in every day.
6090. Do they examine the mine before the men enter in the morning? The daymen go down previous to the men going in, and half the place may be examined before the men enter in the morning.
6091. Do you know that it is the law that such an examination should be made? It may be the law, but on such a small work as that where no noxious gas has been found we have not carried it out.
6092. Was it done in the old pit? No.
6093. That was not a small work? It was a large size, certainly.
6094. How long has the present pit been going? About four years.
6095. What system of ventilation have you? Only natural ventilation.
6096. Have you good ventilation? Very good.
6097. There have been no complaints made to you as to the ventilation? No complaints.
6098. What is the thickness of the seam you are working? Two feet.
6099. Have you had any experience of the long-wall system of working? Yes.
6100. Do you think that system would suit the seam you are working? No; it has been tried, but the expense was found to be greater than that of stoop and room.
6101. Why was it not a success? On account of the expense of timbering and the roadways to keep open.
6102. And you have never seen any inflammable gas? No.
6103. *By Mr. Fryar:* I suppose the less ventilation you had the more likely you would be to see inflammable gas if there was any there? Quite likely.
6104. One of the objects of ventilation is to sweep out noxious gases of all kinds, is it not? Yes.
6105. And if the gas was not swept out and any was exuding you would be likely to see it? Yes, if there was deficient air.
6106. Have you seen any black damp? Yes, in various mines.
6107. But in the West Moreton mines? Not in the present seam. I have seen it in the old seam.
6108. You have driven a tunnel down since you took the place? Yes.
6109. And have connected with the old workings? Yes.
6110 When you holed into the old workings did you get any gas—either carbonic acid or inflammable gas? No, we made it our business to go round all the workings when we were going through, and we found none.
6111. You went round the workings before you holed through? Yes.
6112. And you made sure there was no gas? Yes.
6113. How did you examine the workings in that case? With a naked light.
6114. If there had been gas standing there, what would have become of you? Well, my partners are both experienced men in gas, and I have no doubt they would have detected it.
6115. Did they appear to think they could conduct the examination safely with a naked light? Well, the air was going. They did not see anything.
6116. But you went in with that object? With the object of seeing where the tunnel would come through.
6117. There is a very steep declivity in that seam? Yes, there is.
6118. Then in going up a room it would not be likely that you would find black damp? It is rarely found in the upper rooms, although I have seen it coming off faults in the upper places.
6119. But it would not lie there? No.

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6120. It will run down the hill like water? It is supposed to lie low down.
6121. Consequently, if there was any gas there it would be inflammable gas? Yes.
6122. And yet you went there with a naked light? Yes, but the workings were all clear. The workings had been carried on up to the time we took possession. The place was worked the week previous to taking it over. They were, therefore, not exactly old workings.
6123. You kept on working until the tunnel holed into the lower workings? Exactly.
6124. But you have never seen any explosive gas there? No noxious gas.
6125. *By Mr. Rankin:* You say long wall was tried? Yes.
6126. Was that off the shaft or in the tunnel? Off the shaft.
6127. And you still kept working off the shaft until you got through with the tunnel? Yes. The former proprietor tried long wall for a little bit, and found it more expensive.
6128. But you know for a fact that long wall is a little expensive at the start. It is after you get it away that you begin to get the benefit of it? Quite so, but the lowness of the seam might not be in its favour. You generally have to allow something for brushing in long wall.
6129. I think you said you kept a report book? Yes.
6130. But you do not examine the places in the morning. How many places are there going? Ten places.
6131. The man who clears out the shots fired at night examines the places in the morning? Yes. That is done before the men go down.
6132. And afterwards the places are examined, but the men are down before that? Yes.
6133. Are the men working in the mine contractors, or are there a few men whom you employ? I have two partners, and they are both in the brushing. Three have the lease, and one is a workman.
6134. *By Mr. Glassey:* What is the distance between the seam you are working and the seam that was worked in the old West Moreton shaft? The seam in the old working shaft was 620 feet down, and this is at a depth in the old shaft of 156 feet.
6135. Then you have a connection between the mine and the main shaft? Yes.
6136. Does that act as an upcast? The main shaft is the downcast, and the tunnel is a very strong natural upcast.
6137. You have not many men there? Only twelve miners.
6138. Before going there where did you work? I was in Ebbw Vale.
6139. How long were you there? I was manager for fifteen months.
6140. Was that mine examined in the morning? No.
6141. No examination was made at all? No examination was made at all.
6142. And in all the other mines in which you worked you never discovered inflammable gas? Never.
6143. According to your experience, has the ventilation generally been good or bad? I have been connected with places, particularly on the north side, with grand ventilation.
6144. You never had any complaints to make, nor were the men compelled to meet in conference and complain about the deficient ventilation? I have never had to make complaint so far as I am personally concerned.
6145. The system generally in the mines in which you have worked was to carry forward the gob to make the ventilation? Where there was gobbing to be carried, you always carried it as far towards the face as possible for your own benefit.
6146. When you did not have sufficient material to build the gob, how did you manage? We waited until the first cut through was made.
6147. Was there any specific rule as to the distance between one cut through and another? I always considered that 25 to 30 yards was sufficient.
6148. That is a rule you laid down yourself while managing? Yes.
6149. But in other places where you worked, was there any specific rule? Not that I know of.

ALLEN BROWN, manager of Eclipse Colliery, examined:

A. Brown. 22 May, 1900.

6150. *By the Chairman:* Are you the manager of the Eclipse Colliery? Yes.
6151. How long have you been manager there? I started at the beginning of April this last time.
6152. Were you managing that colliery before? Yes, I managed it one year and eighteen months before that.
6153. How long ago was that? I went there two years ago last February, and left last October.
6154. How long have you worked in the Ipswich district? I was underground manager for John Wright seventeen years ago, and have been working at Wright's for about fifteen years.
6155. Had you any experience of coal-mining previous to that? Yes, I had twenty years' experience before I left the old country.
6156. In what part of the old country had you that experience? It South Staffordshire, Leicestershire, and Warwickshire.
6157. Had you in the old country a large experience of fire damp? Yes.
6158. In which part was that? In most parts that I worked in. I was under-fireman at Victoria Colliery for some time, and also under-fireman for about two and a-half years in another colliery.
6159. Then you have had a great deal of experience of gas? Yes, experience enough to have the beard and whiskers taken off me.
6160. Have you seen any fire damp in the Ipswich district? I have seen fire damp in the old Eclipse Colliery—that is, the tunnel which has water in it now, and it was seventeen or eighteen years ago that I saw the gas.
6161. Did you see any quantity there? Well, I gathered it from a blower in a jam tin in the side next the rib. I put the jam tin round it in the morning, and during the dinner time I put a hole in the jam tin, and there was a bit of a puff. I got about as much gas as would go into the crown of my hat.
6162. Have you ever seen any fire damp in any mines in this district since that time? No.
6163. None at all? None at all.
6164. Have you ever had any report made to you of gas having been seen in any of the mines you have worked in? No. If there was any gas reported to me I would certainly visit the spot where it occurred myself, and would not trust anyone under me to examine it. The places are examined by the underground manager every morning, and I visit the places myself twice or three times a week.

A. Brown. 22 May, 1900.

6165. Does the underground overman examine the places every morning? Yes.
6166. Before the men enter? Yes, before the men enter he is back on the top.
6167. Does he leave any mark to show that the place has been examined? Yes; I told him to put the day of the month on a shovel or the face.
6168. Does he carry out that instruction? Yes, I know he does that, because I have asked the miners.
6169. How long has that been done? Since I have been there.
6170. Was it done before that? No; I visited the places myself before that, but it was a new place then, and of course there was no underground boss, only myself.
6171. Does the overman make a report in a book? Yes.
6172. Every day? Yes, every day.
6173. And you say you visit the working places in the mine two or three times a week? Yes.
6174. Do you make a report? I have not made any report. I thought it was not necessary as long as things were in working order.
6175. Are you working two seams in the Eclipse Colliery? Yes.
6176. What distance are they apart? Ninety-seven feet perpendicularly.
6177. What method of ventilation have you? A fan.
6178. For which seam—the upper one or the lower one? The lower one. That is where the new shaft is going down to.
6179. In the other seam what method of ventilation have you? There are two shafts and a tunnel into that.
6180. Is the ventilation good? Very good.
6181. Have you ever had any black damp in there? Well, no, I cannot say that I have had any black damp in those places, but in the old Eclipse I had black damp. But black damp it is easy to get shut of, if there is not much of it.
6182. *By Mr. Rankin:* You have an upcast and a downcast, haven't you? Yes.
6183. That is to say, there are two separate shafts or tunnels? Yes.
6184. That is in the one seam? Yes.
6185. And you have that in the other also? Yes; we shall have when the new shaft is sunk.
6186. How many men have you at work altogether? There are about twenty on night and day.
6187. Twenty in each shaft, or twenty altogether? Twenty altogether.
6188. And you have fairly good ventilation? Yes.
6189. *By Mr. Glassey:* You say that the underground overman examines the mine in the morning and keeps a record in a book of the condition of the mine? Yes.
6190. How long is it since you commenced that system? We started it from the time I went there, but whether there was a book kept there before that I cannot say. It was in the beginning of April last that I went there.
6191. Was it started then because at that particular time there was a Commission appointed to come into this district? No.
6192. You think that the fact of the Commission being appointed had no influence in having that done? I do not think so. I said to Jim Hare, a friend of mine, that when I went back I would keep a report book and enter anything that occurred while I was there.
6193. *By Mr. Rankin:* You know that is the law, don't you? Yes.
6194. *By Mr. Glassey:* Does Mr. Hare work in your mine? No; he is manager for George Ware, and he and I are intimate. He worked under me in the old Eclipse sixteen or seventeen years ago when he first came out.
6195. Is the underground overman who examines the mine in the morning a competent person for that work? Well, he has worked in the mines for a long time. He has worked where there is gas, or where there has been gas reported to exist. He has not had experience like a miner who has come from the old country, but he is a practical miner as far as Queensland miners go, I believe.
6196. And he makes a record of his examination in his book? Yes.
6197. As general manager do you frequently examine both the workings above and below ground? Yes; whenever I go down I go round and examine the workings.
6198. Have you any particular rule as to how often you examine the workings above and below ground? No.
6199. You don't examine them weekly or fortnightly? I examine them twice a week, anyhow.
6200. You have not commenced making a record of your own examinations yet? No.
6201. Do you keep a plan of the mine? Yes.
6202. Have you that plan with you? I have not. It is at the office, and I generally go there when I want to see it.
6203. How often are the workings brought forward on that plan? About every three months, I believe.
6204. Are you sure of that? Well, it is not above three months since they were brought forward.
6205. Before the men enter the mine in the morning where do they remain until a report is received as to whether their working places are safe or not? On the top.
6206. And since this examination was commenced you say the day of the month is always put in the working places by the man who makes the examination? Yes; he puts the date on a shovel.
6207. In the event of some particular part of the roof being bad, or some part of the side being bad, or some sprag being wanted, what mark do you put to indicate that? The report comes to me, and I go myself and instruct the men accordingly.
6208. You say you have a fan at your mine? Yes.
6209. What is the power of that fan? It is only a 4-inch pipe carried down out of a 12-inch one.
6210. Do you think, as a practical man, that that is sufficient ventilation for the men you have employed? Well, the men are not growling about it. They are satisfied under the circumstances.
6211. I am not talking about the men. I am asking for your opinion as to whether that is sufficient fresh air for the number of men employed? It is not for me to say.
6212. But I want you to say? What a man gets and what he has to put up with sometimes are two different things.

A. Brown. 22 May, 1900.

6213. Do you think that by that means the men get a sufficient current of fresh air? I have worked in worse places. Of course, the air might be better, and if there was an air shaft down it would be, but under present circumstances the air is good enough.
6214. *By Mr. Rankin:* And that air shaft is going down? Yes, it is down 80 feet.
6215. *By Mr. Glassey:* How long will it be before you have connection with that shaft? Three months.
6216. And in the meantime you say the air is good? Yes, we keep the air as close round to the men as we possibly can by bratticing or any other plan that will give them greater comfort.
6217. Have you had any complaints from the men with regard to deficient ventilation? No, the men do not complain. If they complain to me I try to find a remedy.
6218. Have you medical comforts—bandages, stretchers, &c., at your mine? No.
6219. No stretchers or medicine? No. I would not like to see them used.
6220. *By Mr Fryar:* Do you know whether Mr. Wright has them? Mrs. Wright has a good dose of medicine up at the house, but what she uses I could not say.
6221. The men have never made any complaints? No.
6222. If they had anything to complain of, do you think they would complain? Oh, yes; they are not afraid of me.
6223. *By Mr. Glassey:* Do you know that it is the law that these medical comforts should be kept at the mine? I believe they would find bandages, or medicine, or anything else if they were required, but I hope we will never need them.
6224. You have only a limited number of men employed now? Ten on each shift.
6225. But you have had a great many more employed from time to time? In the other place—not in the present place. We have had as many as fourteen or fifteen in the other place until lately.
6226. And with the exception of that small quantity of gas that you speak of, you have never seen any gas? No.
6227. Do you think that in examining the mine in the morning it would be better to examine with a safety lamp? If there was any quantity of gas it might be better, but under present circumstances, when there are only blowers found, I do not think it is necessary.
6228. You think examination by a competent man with a naked light is sufficient? I believe if I went into a place where there was gas I could tell it without any light at all. If there was gas reported to me I should visit the place myself every morning. I would trust to no man.
6229. But the report you might hear might be the report of an explosion when a man had lost his life? No gas accumulates to any extent in that mine.
6230. Then under present circumstances you would not recommend the examination of the mine with a safety lamp? Not under present circumstances.

JAMES EVANS, miner, examined:

J. Evans. 22 May, 1900.

6231. *By the Chairman:* You are working in Wright's Eclipse Colliery? Yes.
6232. What are you there? A miner.
6233. How long have you been working there? About seven months.
6234. And how long have you worked in the Ipswich district? About twenty years.
6235. Had you had any experience of coal-mining previous to that? No.
6236. All your experience in coal-mining has been gained in this district? Yes.
6237. Have you ever seen any fire damp in any of the mines you have worked in? Yes; about eleven years ago in Waterstown.
6238. Have you ever seen any in Wright's Eclipse Colliery? No.
6239. Did you see gas often at Waterstown? No; only on three shifts.
6240. Was there any accident from it while you were there? No.
6241. Have you ever seen fire damp in any other mine? No.
6242. What are the principal mines you have worked at in the Ipswich district? I have worked at Aberdare, in Boxwood, Waterstown, and the Eclipse.
6243. Has the ventilation in these mines been fairly good? Yes; pretty fair.
6244. Did you ever have to make complaint to the manager on account of the ventilation? No.
6245. Not in any of the mines? No.
6246. Have the mines always been examined in the morning before the men went down? Yes mostly.
6247. All the mines that you have been in? Yes.
6248. Has there been someone appointed to examine them? Yes.
6249. *By Mr. Rankin:* Was any report of these examinations kept? The underground manager used to go into the places before the men entered and used to put the day of the month on the shovel.
6250. Has that system been in force for some time? Ever since I have been at this place it has been done.
6251. And was it done at the other places? It was done at Waterstown also.
6252. And you cannot speak as to a report being made? No.
6253. *By Mr. Glassey:* Where were you working before you went to Wright's? Waterstown.
6254. And prior to leaving Waterstown the examination spoken of by yourself was always made in the morning? Yes.
6255. Was that done in every working place in Waterstown? I could not say; I am only speaking for my own place.
6256. How long ago is it since they commenced that examination in the morning? I could not say to a month.
6257. About how long? For the last two or three years that I worked at Waterstown.
6258. During two or three years that you worked at Waterstown that inspection was made in the morning by some person appointed for the purpose? Yes.
6259. And the date put on the shovel to indicate that an examination had taken place? Yes.
6260. In the event of any defect being found in the working places, what mark did the examiner leave, in addition to the date, to indicate that there was something wrong? Well, nothing ever occurred in that way.
6261. There is a morning examination of the mine in which you are working now? Yes.

J. Evans. 22 May, 1900.

6262. Who is the underground overman now? A man named Thomas Kershaw. He goes down at 6 o'clock, and the men enter at 7 o'clock.
6263. Has the ventilation in the mine in which you are now working been considered good? Well, it is very good under the circumstances.
6264. Do you think the circumstances might be better? Yes, by and by.
6265. Has the ventilation generally been good or bad? It has always been pretty good since I have been there.
6266. Are there any complaints on the part of the men of deficiency of ventilation? Not as far as I know.
6267. The men have never held any meeting to discuss the question of deficiency of ventilation? No.
6268. And if any complaints are made to the management with regard to deficiency in the ventilation, are those complaints generally attended to? Yes.
6269. Have you seen gas at Waterstown in large or small quantities? In a small quantity. It only lasted three shifts, and it occurred when we were opening the dip and driving into the winding shaft. After we had driven through there it was never seen again.
6270. *By Mr. Fryar:* And during those three shifts you had to use a safety lamp? Yes; there was no gas after the air course was put through.

WILLIAM BARNES, miner, examined:

W. Barnes. 22 May, 1900.

6271. *By the Chairman:* Are you a miner? Yes.
6272. Where are you working? At Mr. John Wright's.
6273. That is at Wright's Eclipse Colliery? Yes.
6274. How long have you been working there? About seven months.
6275. How long have you worked in the Ipswich district? Since I was a boy.
6276. Has all your experience in coal-mining been in this district? Yes.
6277. What mines have you worked in? The first I worked in was the Rossend, which is now called the Haighmore Colliery.
6278. In what other mines have you worked? In Mr. George Ware's mine?
6279. Which one is that? I cannot give you the name of it, but it is one that Tunley worked some years ago.
6280. Have you worked in any other? Yes, in Waterstown.
6281. Have you ever seen any fire damp in any of those mines? I saw a little at Waterstown.
6282. How long ago was that? I could not be sure to a few months, but it was a couple of years ago, I think.
6283. Was there much gas there? There was very little.
6284. Did you see it often? No, I only saw it once.
6285. And then it was in a small quantity? Yes, in a very small quantity.
6286. Was it in a cavity, or where? In a break in the roof.
6287. Have you seen gas in any other mine? No, that is the only occasion on which I have seen gas in this district.
6288. Are the workings in the mine where you are at present working examined every morning before the men enter? Yes.
6289. Who makes the examination? Mr. Kershaw.
6290. Is he the overman? Well, he is the biggest part of his time there.
6291. What is his position in the mine?—Is he overman, or deputy, or what do you call him? I should call him the deputy, or overman.
6292. Do you know whether he makes a report of his examinations in a book? I could not say, but I know that he examines the places.
6293. Where are you while that examination is being made? On the top.
6294. And you are not allowed to go down until he makes his report? Until we get the signal.
6295. Does he leave any mark in your working place to show that he has been there? Yes, he generally puts the day and date on a shovel.
6296. Is the ventilation of the mine good? No, it is not very good, but we have air enough to work.
6297. Are you working on the lower seam or the upper seam? I am on the lower one.
6298. *By Mr. Rankin:* I think you said the overman generally puts his mark on a shovel—what do you mean by "generally"?—Does he do it every day? I do not notice it every day, but it may be on a shovel all the same.
6299. Do you think it would be possible for the mark to be there and for you not to see it? We do not take particular notice to see whether the shovel is always marked, but if we looked for the mark we might see it.
6300. *By Mr. Glassey:* Do you say you have been in this district since you were a boy? Yes.
6301. What age are you now? About thirty-three.
6302. And you entered the mine when you were fourteen years of age? No, I have been working in the mines about twelve years.
6303. And during the whole of that twelve years in the mines in this locality you have only seen gas once? Yes.
6304. Was it only the one time, or in the one mine? The one time.
6305. Was there much of it? No, there was very little of it, just a small bit in a crevice.
6306. Did you, or the men generally employed in that mine, complain of any quantity of gas being there while you were working in the mine? No.
6307. During the time you were working at Waterstown was the mine examined by some person every morning before you entered? Yes.
6308. What mark did he put there to show that it was examined? He put the date either on the coal or on a shovel.
6309. Is that the system which prevails in Wright's mine? Yes.
6310. I think you said you do not always see the mark? I do not always look for it.

W. Barnes. 22 May, 1900.

6311. Do you mean to say that the shovel is taken hold of and used without being examined to see if there is a mark on it or not? There are two shovels in the place, and I may get the one that is not marked.
6312. Isn't the shovel that is marked put in some particular place? It is generally propped against the face.
6313. And you do not know whether the mark is put there every day? I am not bound to get the shovel with the date on.
6314. Don't you think it is proper that the examination should be made every morning? Yes.
6315. Do you yourself examine your working place before you start in the morning to see if it is safe?—Do you sound the roof? If I have any doubt I may sound the roof; but if the roof was good over night I would not be very particular in the morning.
6316. If any props were out of order would the man who examines the mine in the morning leave any particular mark to show where props should be set, or where sprags should be put? I have never noticed anything of that kind.
6317. You remain at the top until the signal is given to go down? Yes.
6318. When you meet the underground overman and there is anything deficient in your place, does he tell you what is deficient? It has never happened with me that there has been anything deficient.
6319. Have you ever heard him tell any other men that there was something deficient—some cross bars or something of that kind requiring to be set? Yes, I have heard him giving orders to some men to keep their timber thicker.
6320. And have you ever heard him tell anyone that sprags required to be put in as the coal was likely to come down? No, I have never heard him mention anything about sprags.
6321. You say that the ventilation generally speaking has been fairly good? Yes.
6322. Is the ventilation now really good? No, it is not good.
6323. It will be better when they have a connection between the tunnel and the new shaft? Yes.
6324. Do you think the management are doing all they can to supply you with a reasonable amount of ventilation in the meantime? Yes, I think they are.
6325. There are no complaints on the part of the men with regard to the ventilation? No.

(Walloon.)

MONDAY, 28 MAY, 1900.

PRESENT:

MR. RANDS | MR. GLASSEY, M.L.A.
MR. FRYAR | MR. RANKIN

MR. THOMAS.

MR. WILLIAM HENRY RANDS, CHAIRMAN.

JOHN HUNTER, manager, Caledonian Colliery, Walloon, examined:

J. Hunter. 28 May, 1900.

6326. *By the Chairman:* Are you the manager of the Caledonian Colliery, Walloon? Yes.
6327. Are the working places in that mine examined before the men enter? Yes.
6328. Who examines them? Arthur Bergin, the deputy.
6329. Does he make the examination with a naked light? Yes.
6330. Do you keep a plan of the mine? There is a plan here.
6331. When were the workings last brought forward on that plan? It has not been made up since I came here.
6332. *By Mr. Rankin:* Since you took charge? Yes, since I took charge.
6333. How long ago is that? Four and a-half years.
6334. *By Mr. Glassey:* You are not surrounded by any old workings? No, all the old workings are in those 200 yards on each side of the hill.
6335. Are you approaching any other mine? No.
6336. *By the Chairman:* Where are the old workings? Above us, to the left side of the tunnel. We dip down below them about 75 yards.
6337. *By Mr. Rankin:* There are no other mines in the neighbourhood? No.
6338. *By the Chairman:* Is there any water in your old workings? There is no water in them. Perhaps I should not say there is no water in them, but there is no water in them that I could not walk into.
6339. Do you keep a report book for the deputy? Yes.
6340. Do you keep a report book for yourself? Yes.
6341. How often does the deputy sign his report book? Every day.
6342. And how often do you sign your book? Once a week.
6343. Can we see those report books? Yes. [*Daily and Weekly Report Books produced.*]
6344. When was the manager's report book commenced? On the 7th of May, 1900.
6345. When was the deputy's report book commenced? On the 10th of May, 1900.
6346. *By Mr. Glassey:* Where is your upcast shaft? At the rise.
6347. Have you any communication between where you are working and the upcast? We have from where the Commission were to-day.
6348. You have communication between the two? Yes.
6349. And if anything went wrong in the tunnel you could use that shaft? Yes; we could put a block on the top, and put a rope down.
6350. *By Mr. Rankin:* What is the depth of the shaft? Two hundred feet.

J. Hunter. 28 May, 1900.

6351. *By Mr. Glassey:* Have you a furnace? We have a furnace, but do not generally use it, except for two or three months in the summer time.
6352. How do you get your current, then? By natural ventilation.
6353. *By Mr. Fryar:* You were away at Oakey Creek for a few weeks? Yes.
6354. How long is it since you were at Oakey? I was there in January last.
6355. *By Mr. Glassey:* How long were you at Oakey? Three or four weeks.
6356. *By the Chairman:* Where is the plan of the mine? Mr. Wright keeps it.
6357. Do you know whether it was made up while you were away at Oakey? No.
6358. *By Mr. Glassey:* Would not the proprietor of the mine have mentioned it to you if the plan had been made up in your absence? He might.
6359. Who was in charge while you were away? My brother was in charge then.
6360. *By Mr. Rankin:* Don't you think that if your brother had made up the plan during your absence he would have told you? Yes, I think so.
6361. *By the Chairman:* Have you seen any inflammable gas in the Caledonian mine? No, never in Queensland.
6362. How long have you worked in Queensland? Eighteen years.
6363. Was the whole of that time spent in the Ipswich district? All that time, except four years, when I was away.
6364. Have you ever seen any inflammable gas in the Ipswich district? No.
6365. *By Mr. Rankin:* You don't allow the men to ride up the tunnel in the wagons? No.
6366. *By the Chairman:* The roof down the dip looks very slippery—have you examined it lately? Yes, I have been down there, and I think it is all right.
6367. *By Mr. Glassey:* Have you a safety lamp at the mine? No, I do not need one.

(Ipswich.)

WEDNESDAY, 30 *MAY*, 1900.

PRESENT:

MR. RANDS | MR. GLASSEY, M.L.A.
MR. FRYAR | MR. RANKIN
MR. THOMAS.

MR. WILLIAM HENRY RANDS, CHAIRMAN.

LLEWELLYN DAVID LLEWELLYN, Assistant Inspector of Mines, further examined:

L. D. Llewellyn. 30 May, 1900.

6368. *By the Chairman:* Have you now entered upon your duties as Assistant Inspector of Mines? Yes, I have.
6369. When did you hear of the explosion at Waterstown? At a quarter past 8 I saw an account in the paper.
6370. *Did you proceed to the colliery?* Yes, I arrived there at 9·30.
6371. Did you go below? I was at the office for a quarter of an hour. The manager sent for the plan, and sent back to say he could not get it for a while, but he would have it ready at the time I came out of the pit.
6372. And then did you go below? Yes.
6373. Who went with you? The manager.
6374. Did you get to the site of the explosion? As near as the manager said it was safe for anyone to go.
6374A. Have you a plan of the mine? No, but the underground manager, who is in attendance outside, has the plan. [*Plan produced.*]
6375. Now, will you describe to the Commission exactly where you went? We went down the crosscut or engine plane, and I asked the manager whether we could go along the middle level. He said he would not care to go along there as the creep was still on, and his brother said it was not safe. Then I went down to what is called the bottom level, to Bootle's room, which was pointed out to me about 30 yards from the fall. That is the point where the fall occurred.
6376. What is the distance from the fall to the fault? Twenty yards.
6377. And how far did you get from where Bootle was? They told me it was about 15 yards further on from the spot where Bootle met with the injury. The rooms had been driven right on to the fault. They were stripping the fault.
6378. *By Mr. Glassey:* Did the fall come right off the fault? Not where I was at. The air was very bad there.
6379. *By the Chairman:* Now, did you see the fall from any other place? No.
6380. Only from that one place? Only from that one place.
6381. What was the state of the air there? The ventilation was weak—decidedly weak.
6382. Did you go in there with a safety lamp? Yes.
6383. Did you find any trace of gas in any place? Not where the fault was.
6384. Did you see any gas in any place where you went? No.
6385. As far as your examination yesterday went, did you find no gas at all? A slight cap just at the fall, but I attribute that to the inferior oil. The lamps would hardly burn. I did not see any gas.
6386. *By Mr. Glassey:* Do you think the cap you saw was really gas? It was very close to it. I am not prepared to say it was. It was a very slight one; just such as you would expect to have when using inferior oil.
6387. Did the light taper up? Very slightly.

6388. In your judgment would you consider it was fire damp? If I had had proper oil in the lamp I should certainly look upon it as gas.
6389. Do you think the fact of the light being defective or the oil being defective would preclude you from observing gas? I have often seen a small cap on lamps when the oil was defective.
6390. *By the Chairman:* Could you swear it was gas? No, I would not swear it was gas.
6391. You say the ventilation was not good at the time you were there? No, it was not good.
6392. Do you think that fall had anything to do with stopping the air getting round? No, there was plenty of room over the fall.
6393. From what you saw do you think sufficient air was entering the mine, supposing it had been properly conducted, to ventilate those places properly? No, I do not think so. The air was fairly strong down the dip, but they had a large amount of old workings.
6394. *By Mr. Rankin:* I suppose you have been at the blast furnace in the mine? Yes.
6395. Don't you think there was plenty of air from there for ventilation if it was properly conducted? Well, I don't agree with the furnace and boiler system, but if the air were concentrated it might be sufficient.
6396. I don't agree with the furnace as a means of ventilation any more than you do, but what I want is your opinion as to whether there was sufficient air from the furnace, if it was properly conducted, to ventilate the mine? Yes.
6397. *By the Chairman:* That is my question—If the air was properly conducted, and not allowed to run to waste, was there sufficient air to ventilate the places? Yes, but the putting up of bags to stop the air is entirely at variance with mining principles.
6398. But if the air was properly conducted, do you think there was ample to ventilate the places? Yes.
6399. Then you think the arrangements for ventilation are bad? Yes, they are bad.
6400. The arrangements for conducting the air? Yes.
6401. In what respect? To begin with, the bags are a bad arrangement.
6402. Where are the bags? On the main headings, about 15 or 20 yards in from the main dip, and they enable a lot of air to go back to the main return, so that it would not go round to the other places.
6403. Did you notice anything else in the system of ventilation? Yes, the system they have of building up the gobs, though it may be economical for the time being, is not what it might be.
6404. Are those gobs built up along the main levels? Yes.
6405. *By Mr. Glassey:* Are those gobs along the main levels built close up to the roof? Yes, I saw some.
6406. Is there a considerable means of escape for the air at the top of the gobs? Yes, there always is; you cannot depend upon gobs.
6407. *By the Chairman:* It is not a good system? It is a very bad system, even in a mine that is not giving off gas.
6408. Do you think it is a very bad system, even if the gobs are built as well as they possibly could be built? Yes.
6409. Is there any other remark you have to make in reference to the ventilation of the mine? I was not able to go down the intake. I should like to have gone down there, as my impression was that they should have had air courses, or air bridges, as we called them in the old country.
6410. *By Mr. Rankin:* Don't you think it would be possible for them to split the air, and carry it to the different places without taking it round the old places? Yes.
6411. Wouldn't that be the better plan? It would be a very much better plan; the air should be concentrated as much as possible about the working places. But there the system of ventilation is the reverse of any that I have seen, as the air has to go round the old workings before it goes to the men.
6412. *By the Chairman:* Did you come to any conclusion as to where the gas came from that caused the explosion? From what they told me I am inclined to think that it came from the fault.
6413. Is the roof broken? There are several crevices near the fault which are likely places for gas to come from.
6414. *By Mr. Fryar:* Is this your first inspection of the Waterstown Colliery? Yes.
6415. Did you see the inspector's book at the mine? I did.
6416. Did you form any opinion as to whether sufficient cautions or advice had been given to the manager? I did.
6417. Will you tell the Commission what conclusion you formed? Had the instructions contained in the inspector's report of the 10th of April last been carried into effect I feel convinced that this accident would never have occurred.
6418. Was anything mentioned about the probability of gas being found there? There was.
6419. Anything about examining the place with a safety lamp? Yes, with an uninjured safety lamp.
6420. And locked safety lamp? And locked safety lamp.
6421. Was there anything about a special examination after the mine was standing at the week end? Yes, especially as crevices existed, and attention was called to the fact that gas might be lurking in the rise workings. In fact, had the inspector known of the presence of this gas there at the time he could not have put it more definitely.
6422. *By Mr. Rankin:* He could not have given more definite instructions? No.
6423. *By Mr. Glassey:* During your examination of the means of ventilating the shaft did you come to the conclusion that it was properly ventilated or that the air was properly conducted round the workings? Well, with the number of men they have got there is no doubt sufficient air. With the present extent of the dip workings there should be ample air.
6424. I think you said you did not examine the intake? No. They told me there was too much water, and I could not get there. As a matter of fact I had not seen the plan when I went down the shaft. I probably would have wanted to have seen more had I seen the plan beforehand.
6425. I suppose you know it is contrary to the Act to have water there? It certainly should be passable.
6426. So that they said there was too much water in the main intake to enable you to travel? Not exactly that, but they said the water was a bit deep and there were some falls. That is what the manager told me. It was my first visit to the colliery and I did not know my way about.

L. D. Llewellyn. 30 May, 1900.

6427. *By Mr. Rankin:* You wanted to see the plan before you could properly inspect the workings? The plan was not available until half-an-hour after I came up the shaft. Mr. Johnson had sent for it.
6428. *By Mr. Glassey:* Where did he say the plans were? At his house.
6429. Now, at that particular place which you examined close to where the accident occurred, what was the condition of the means of ventilation for carrying air to the working places? Very primitive. Most of the air was escaping back.
6430. Before it reached the men? Before it reached the main working places.
6431. So that in reality there was practically no ventilation at all? Well, very little. It was totally inadequate.
6432. It was totally inadequate to supply the workmen working there with pure air? Yes.
6433. So that if any gas, explosive or otherwise, accumulated, there was really no means of carrying it away? No.
6434. Did you inquire whether the furnace had been idle from the Saturday up to the Monday morning? I did.
6435. Was it out of blast? They banked the fires.
6436. On Saturday? On Saturday.
6437. Do you think the banking of the fires from Saturday until Monday morning is a good system? If there is fire damp in the pit most undoubtedly it is not. Of course it is very awkward to keep pressure on the boilers. With an ordinary furnace it would be simplified, but to put pressure on the boilers with no outlet for the steam would be rather awkward.
6438. Could not the boilers be damped down as well as the furnace? The boilers are damped down, but it would be easier to keep the furnace going at the week's end than to keep the boilers going, as the steam would be constantly rising in the boilers.
6439. *By Mr. Rankin:* Don't you think that obstacle could be obviated by easing the safety valve, and letting the steam blow off? Yes.
6440. It would still help the ventilation? It would, but it would not make a very perceptible difference. If you did adjust the safety valve it would cause an immense amount of steam to escape. They could undoubtedly keep a small fire up by adjusting the safety valve.
6441. *By Mr. Glassey:* Judging from your examination, in addition to the caution embodied in the Chief Inspector's report of 10th April, do you think that the accident would have occurred if there had been sufficient ventilation, or if the Chief Inspector's warning had been taken? If the warning had been acted upon with regard to the uninjured safety lamps, and if the air had been concentrated at the different places where it should have been, I do not think there would have been any fire damp to be seen there. There was ample air if it had been brought round to the face.
6442. At any rate, the system of ventilation known as the "gob system" is not a very good one? No, it is not.
6443. What would you suggest as an improvement? I would suggest driving parallel levels. They would not then be depending upon bags.
6444. You would discountenance the use of bags altogether? Entirely.
6445. And have doors erected instead? Yes.
6446. As far as your observation went, was the air, little as there was, split or divided as it should have been? No.
6447. You could not get near the place where Mr. Bootle was injured? So the manager said. He said his brother had been unable to go there.
6448. Had there been a fall in the place where he was injured, or alongside of it? The manager told me the fall occurred subsequently. I am not quite sure whether it was the deputy or the manager who told me that the fall occurred after the explosion. The other one said it occurred before the explosion.
6449. *By the Chairman:* Would there not have been great difficulty in getting Bootle away from the place if it occurred before the explosion? I think so.
6450. Could they have got him away? Yes, with the fall I saw.
6451. *By Mr. Glassey:* Was the fall you saw an extensive one? No, but the ground was working slightly, and the props were all bent and crooked.
6452. What thickness was that fall? It varied. You would have to crawl over the fall in Bootle's room about 3 feet along the side.
6453. Did you go right on top of the fall? Yes, right over, and the lamp would not burn; hence my coming back. I would not risk it with a defective Clanny lamp.
6454. At any rate, on the top of the fall you could not discern gas? I could not discern gas.
6455. *By Mr. Fryar:* Do you know how many men were working in that level? I was informed four men.
6456. Were those four beyond the fall? Two beyond the fall.
6457. Would there be any possibility of measuring the quantity of air required to supply two men in the ordinary course? Not in that course, where there were so many leakages, and with an old gob on one side.
6458. Do you know how many men were in the mine altogether? I was informed there were fourteen on the face of the level. That should be eighteen, including the men working in the other level.
6459. And would you recommend splitting the air for eighteen men? Not necessarily for eighteen men. One split should be ample for eighteen men.
6460. For what number of men does the Act require the air to be split? Seventy, I think.
6461. And consequently, having that in view, it would be a very extraordinary circumstance that would make you split the air when there were only fourteen men? Yes; I do not think it would be at all necessary.
6462. *By Mr. Glassey:* But would that not depend upon how the men were working. Suppose the eighteen men were divided into two extreme sections of the mine? Yes, but I am speaking of these circumstances.
6463. *By Mr. Fryar:* The fourteen men who were down, apart from the four, were all together? Yes.
6464. And consequently there was no inducement in that case to split the air? No; in this case the air is travelling a long distance before it reaches those fourteen men. If they received the air direct from the shaft it would be all right.

L. D. Llewellyn. 30 May, 1900.

6465. But I am speaking of the legal point of view when referring to the splitting of the air? From the legal point of view of course the men must be working at the extreme points of a very large area of workings.
6466. In that case, is there not an objection that the current of air would be likely to become stagnant if too much subdivided? Yes, unless you have a very large amount of ventilation to begin with. I may point out that I noticed that there were no danger marks up. I called the manager's attention to that, and he had them fixed.
6467. *By Mr. Glassey:* Is that for places which were standing? Yes.
6468. Nothing erected across them at all? No. I also quite agree with the Chief Inspector that men should not be allowed to go beyond the door until the examination is made.
6469. In view of this gas being discovered on the Monday morning with rather serious results, and considering that the mine has hitherto been considered fairly safe, and that it has not been necessary to examine it with a safety lamp, what is your opinion now in reference to examination? The examination should certainly be made with a safety lamp for some time to come.
6470. But I am speaking of the period before the accident. If the mine had been examined with a safety lamp that morning, the probability is that there would have been no accident? Taking the condition of the mine as I saw it, I think it would have been wise to examine it with a safety lamp.
6471. But any other mine may show similar signs suddenly? It may.
6472. In that case do you still adhere to your opinion that it is unwise to examine mines in the morning with a safety lamp? I did not say it was unwise; I did not say that.
6473. Well, is it necessary? In this case it undoubtedly is.
6474. I am not speaking of this case only, but of other places also? The deputy says he did examine the place in this case with a safety lamp.
6475. In view of this accident, would you recommend that all mines should be examined in the morning with a safety lamp, and that proper marks or indications should be made to show the men that it had been examined? Will you kindly put that question again?
6476. In view of this accident, would you recommend that all coal-mines in Queensland should be examined in the morning with a safety lamp by a competent person, and that proper marks should be put in the places to indicate that such an examination had been made? I am inclined to adhere to my former opinion that where competent men are employed who know gas, and know what precautions to take in the case of non-fiery mines, mines where gas has never been seen, and where they have thorough ventilation round all the places, I do not see why it should be compulsory to use a safety lamp; but in a mine similar to this one in which the accident has occurred, where men have to go in the teeth of foul or gaseous air which has been produced during the night, the man examining the mine should certainly take a safety lamp. But if he were able to follow the current of air, that would alter the case.
6477. But in the meantime falls may occur, or doors may be left open by accident, or various other things may happen; do you think that it is safe then for even the most competent man to run such risks? Even if a fall had occurred, a man going with the current of air would immediately detect gas if it existed; and if he were a competent man he would immediately put out his naked light and go back and get a safety lamp.
6478. So that you would not recommend the use of a safety lamp until gas had actually been discovered in a mine? Not if the man appointed to examine the mine was a competent man. I am not prepared to recommend the adoption of drastic measures in a mine where fire damp has never been seen.
6479. But you may have other cases similar to this one? I hardly think you will find such another case as this.
6480. *By Mr. Fryar:* Since giving your evidence on a former occasion, have you brushed up your acquaintance with the law on this subject as it exists in England? I have not the English law by me, but I have a fair recollection of what the law is there, as I had a good deal to do with it.
6481. And you still think you are right in saying that it is the law in England that every place must be examined with a locked safety lamp before the men go in? It was recommended by the last Royal Commission.
6482. Let us keep to the one point. Do you know whether that is the law in England at the present time? I am not prepared to say it is not; I was under the impression that it is the law.
6483. Touching the examination of mines with a locked safety lamp, in a case exactly like the present, if you knew they were working at a fault, and that there might be sufficient air for four men, which could not be measured, would that be a fit place to examine with a safety lamp in the morning? Yes.
6484. In preference to a naked light? Yes, most decidedly.
6485. And that, I think, you told us had already been recommended? Yes.

RICHARD JOHNSON, underground manager at Waterstown Colliery, examined:

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6486. *By the Chairman:* Are you the underground manager at the Waterstown Colliery? Yes.
6487. Will you tell the Commission what experience you have had in coal-mining? I have been at it all my life.
6488. How old were you when you commenced? I was ten years of age when I went to the work first.
6489. Where did you begin your experience in coal-mining? The first place I went to was Hooper and Robinson's big seam.
6490. Where is that? At the back of the old Tivoli.
6491. Has all your experience been in the Ipswich district? Yes; except a short time when I was on the Downs.
6492. How long have you been underground manager at Waterstown? Three years next September.
6493. Previous to the accident on Monday last, the 28th instant, had you ever seen gas in the seam you are now working at Waterstown? Yes; I saw gas once down the crosscut.
6494. That is the incline? Yes, down the incline. It was not exactly on the incline, but a few feet to the right-hand side going down.
6495. How long ago was that? About two years ago.
6496. Is that the only time you have ever seen gas in the mine? Yes, in that seam.

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6497. Have you never seen gas in any of the old workings? No.
6498. Where were you when the accident took place on Monday last? I was crawling alongside a pillar in the room of a man named George Johnson—that is, the fourth room from the end of the level.
6499. Is Bootle's room the third from the fault? Yes.
6500. Now, how far up from the level was Bootle? He was right at the level.
6501. How did he get up to that level? He crawled along the rib, and I after him. I used to go round that way every morning for a short cut, to get round the face before the men came down.
6502. *By Mr. Rankin:* How far were we away from where the explosion occurred? You could not be above 8 yards straight through.
6503. *By Mr. Fryar:* Was the room in which Bootle was cut through? No, but the next one was.
6504. *By Mr. Glassey:* Show us on the plan the old workings where we travelled round? [*Witness pointed out on the plan the old workings.*]
6505. *By the Chairman:* At what time of day did the explosion take place? It must have been 8 30 or a quarter to 9.
6506. Whose duty is it to examine the working places every morning? I examine them with another man named Jack Brookes.
6507. Do you go together? No, he goes to one part, and I go to another.
6508. Whose duty was it to examine that particular part of the mine where the explosion took place? I examined that.
6509. Did you examine it on the morning of the accident? I examined one of them.
6510. What do you mean by that?—Did you examine the working places in that portion of the mine where the accident took place? Yes.
6511. The whole of them? I could not get up to Bootle's for the creeping.
6512. Did you attempt to examine it? Yes.
6513. And did you find a creep there? Yes.
6514. So that you could not go any further? No.
6515. At what time did you examine Bootle's place? Very nearly 7 o'clock.
6516. I mean the time you attempted to examine it? Yes, about 5 or 10 minutes to 7.
6517. And did you examine all the other working places in that part of the mine where men were working? Yes, I and the other man.
6518. Were they all found safe with the exception of Bootle's? Yes.
6519. Did you make that examination with a safety lamp? No; we never did.
6520. Did you make a thorough examination for gas as well as for falls? Yes; we sounded the roof and saw that everything was right, and we went into each place.
6521. Did you leave any mark in the places to show that you had been there? No.
6522. Where are the men located while that examination is being made? I always used to keep them at the bottom level.
6523. *By Mr. Rankin:* Where do you keep them now? On the top.
6524. *By the Chairman:* Where were they on the morning of the accident—on the top, or at the bottom level? They came down to the old place at the bottom level and stayed on the stage until they were told things were safe.
6525. Have you seen the report of the Inspector of Mines of the 10th April, which was made at the mine? Yes.
6526. Did you read it? Yes.
6527. Did he mention the probability of gas occurring in that place? Yes; at the faults.
6528. Did he mention anything about being specially careful on Monday mornings? Yes; many a time.
6529. But did he in that report? I could not swear to every word.
6530. As far as you know, did he say anything about being specially careful after the mine had been standing over at the end of the week? I believe he did. I could not keep it all in my head.
6531. *By Mr. Rankin:* Did you read the report? Yes, I looked through it.
6532. *By the Chairman:* Did he say anything in that report about using uninjured and locked safety lamps in examining the workings in the morning? Yes, I think he did.
6533. And what did he say about it; did he recommend their use? If there was any gas he always recommended that.
6534. Will you answer the question?—Did he in that report recommend the use of uninjured and locked safety lamps when conducting the examination of those places in the morning? Yes.
6535. And did you carry out his recommendation? No, I never saw anything to require it.
6536. Do you see anything now? Yes.
6537. Were you in the habit of carrying out the recommendations of the inspector? Yes, in general; but gas was a thing I had never seen and I did not think it necessary.
6538. Did you think you were a better judge?—At any rate, did you carry out the recommendation that Mr. Fryar put in his report? No, not in that case.
6539. What condition is the roof in near the fault? Well, it was very soft—the slate and brushing. The rock seemed good.
6540. Had any falls of roof taken place about there? The slate and brushing behind had fallen previously.
6541. Did you find the fall of roof on examining Bootle's place yesterday morning? Yes.
6542. Was that before the accident took place? No; not what I saw yesterday morning.
6543. Was that fall there when the accident took place? No.
6544. Did the fall take place afterwards? Yes. There might have been some fall higher up, but I could not tell then, as it was not safe to go in there.
6545. After examining the place and finding that creep, did you give any instructions to Bootle? Yes. I ordered both Bootle and his mate and the other two men who were working in the same level to go out.
6546. Did they go out? Three of them did.
6547. Were they all three present when you ordered them out? No; I went and told them that the room was all creeping, and that it was not safe to go in.
6548. In what part of the mine were you when you told them that? On the road in the bottom level.

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6549. Where were they when you told them? At the stage where the men stop.
6550. Did the two men and Bootle's mate go into the level after that? No. Roberts brought an empty wagon to the foot of the room.
6551. Is Roberts Bootle's mate? Yes.
6552. What did Bootle do? He sat with me listening to the giving in of the room.
6553. You say you told him at the stage where the men stop not to go into the level, and now you say he sat there listening to the creep. Could he hear from there? No.
6554. Did he go into the level, although you had told him not to do so? Yes.
6555. Did you go with him? I went back. I did not know how long it had been working; it might have been working all Sunday night for all I knew.
6556. What I want to get at is the exact instructions you gave to Bootle;—you say you told the four men not to go into the level? Into the rooms. The level was all safe, and everything except Bootle's room.
6557. Did you and Bootle and Roberts go along the level towards the room? Yes. Then I went back to make sure that the other men had taken their tools and gone, and I found that they had gone.
6558. Were there three of you then along the level near Bootle's room? No. Roberts had gone. I told them all where to go and work. Bootle said, "I want my tools," and I said, "It is not safe for any man to go there."
6559. What did he do then? He sat down in the next room near the foot listening to the raking of the slate and brushing. I said, "I will never go up there, Tom, because it is not safe for any man; the pavement is now within eighteen inches of the roof. I will go round and get a safety-lamp from Brookes, and I will go along the air course and see if I can get that way."
6560. *By Mr. Rankin*: You mean the way Mr. Glassey and I went? Yes. I was going to get a safety-lamp; I thought there might be a little fire-damp as the place was working, if there was any in the mine at all, and the other man had a safety-lamp with him.
6561. *By the Chairman*: What other man? Brookes.
6562. *By Mr. Rankin*: Why had he a safety-lamp? Because he was going through old workings, and I always made him take it with him there.
6563. *By the Chairman*: Then, you went up to the next room to Bootle's to get into that level? Yes, to see if the men had got their tools away.
6564. What did Bootle do? He just went straight up the road where I told him not to go.
6565. Did you know he had gone up? Yes, I saw him go up.
6566. And then the accident occurred? Yes.
6567. Did he disobey your orders in going up to the room? Yes; I told him to go out, and that nobody would be allowed to work in there that day.
6568. Did you know he was going up there when you started to go round? No, I did not know that he was going. He just crawled along a bit, and then the place gave a crack, and he listened again; it was working heavily.
6569. *By Mr. Rankin:* You were quite near him when the explosion took place? Yes.
6570. *By Mr. Thomas:* Was he on the level, or in his room, when the explosion took place? At the last cut-through to the level.
6571. Not in his own room? No; his own room was further down to the right.
6572. How far were you from him at the time? I suppose I would be about 5 yards away. He stood up, and I saw the gas lit, and lay down as low as I could. He jumped up with his back against it.
6573. *By the Chairman:* Will you mark on the plan the place where he was when the accident took place? He was right at the top corner of George Johnson's room, the fourth from the end. [*Witness indicated the position on the plan.*]
6574. How many yards out? I suppose it would be about 80 yards. The room was kept down the hill in order to make it a good wheel, because it was low. That is what made it so far.
6575. *By Mr. Glassey:* So that as a matter of fact Mr. Bootle was not burnt in his own room? No, he was not in his own room.
6576. What is the distance from where he met with the accident right up to the face of Bootle's working place? About 8 or 9 yards.
6577. In whose room was Bootle burnt? In George Johnson's.
6578. What is the distance from where he met with the gas to George Johnson's working place? It is right at the face.
6579. So that the gas was right at the face? Yes; the air was going round Bootle's place and into George Johnson's place, and into the cut-through of the air course.
6580. What distance is George Johnson's place out? Fully 80 yards; it was worked out, and that is why I was going to try to get with a safety-lamp over the falls.
6581. How many openings or cut-throughs had you in that 80 yards? Two or three. On the top side there is a pillar, and no cut-through at all; it must be about 60 yards.
6582. *By the Chairman:* Was the furnace going on the Sunday previous to the accident? I go to the furnace every Sunday.
6583. Was it going on that Sunday? Yes.
6584. Was it going full, the same as on other days? No, not the same.
6585. What do you do to it on a Sunday? I work the fires up, open the dampers, and then put on more coal to keep them going till Monday morning.
6586. Is coal put on on a Saturday? On a Saturday; and then I bank the fires up on the Sunday.
6587. Was that done on the Sunday previous to the accident? Yes, it is done every Sunday.
6588. *By Mr. Thomas:* Which way do you go down on a Sunday? The engine-driver comes to look after his own boiler on the top, and I meet him there, and he lowers me down, and while he is doing his work on the Sunday I go and see that everything is right down below, and bank the fires to keep them going till Monday morning.
6589. *By the Chairman:* After the explosion was there much after-damp? The explosion put me in the dark; we had to crawl down. I could see nothing but dust.
6590. Was there any after-damp after the explosion?—Who brought Bootle out of the pit? He crawled out himself.
6591. Right from where he was when the accident occurred? Yes.

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6592. Where to? Right out to the stage. Then we went up to No. 2 level, and the dust was going through.
6593. *By Mr. Rankin:* And after-damp, too? Yes. He crawled up to the top. The dust, and I suppose some after-damp was there, and I went up to the other one to see what the road was like there, but it was too thick with dust there, so I said we would have to go round the other way.
6594. Did you take him up the dip? No, we took him along the bottom level.
6595. *By the Chairman:* What point did he crawl from? From George Johnson's room to the level.
6596. Did he walk the whole way? Yes.
6597. *By Mr. Fryar:* Are you not blocked up with water in that direction? No. That is the sump. That is where we bail the water.
6598. Had he not to go through water? Yes, I suppose about 8 inches in the deepest part.
6599. *By the Chairman:* How long was it from the time of the accident until you got him to the surface? I could not tell you.
6600. *By Mr. Rankin:* At what time did you get him to the surface? I suppose about 10 o'clock.
6601. *By the Chairman:* Had he any covering while he was coming out? Yes, jersies, and coats, and things like that.
6602. Had you a stretcher on the surface? Yes.
6603. Had you any bandages? I could not say.
6604. What did you put over him when you got him to the surface? Three blankets on his back, and two round his feet.
6605. *By Mr. Rankin:* Did you put oil on where he was burnt? I could not say. I stopped down below. When I came up he was away in the buggy.
6606. *By Mr. Fryar:* Was he delayed at all on the top? No.
6607. Did you send any message to the top while he was coming up? Yes, I sent a man to get a buggy while he was coming up the dip.
6608. Were men working in those two rooms on Saturday? Yes.
6609. And considering the working of the roof and the creeping of the floor, did you consider those places safe for men to work in on Saturday? I never heard it work until Monday morning.
6610. Were the roof and floor not coming nearer together? Young Roberts told me I would have to bring a pick in and chip a bit of the brushing, as the wagons were beginning to scrape. They often get like that when the pavement heaves. I left that place at 9 o'clock on Saturday morning and went round No. 2 and No. 3 levels, and all was quiet then.
6611. Is it usual for two rooms to be left in at the far end in that way, after outside and above them have been worked out? This one had such a short way to go.
6612. Would it not have been more like workmanship to have the further rooms worked out first? You have to work them as you get the level driven.
6613. But you have to work them to save men's lives? We generally kept two men in the level. We were keeping the level going, and as the men came on they broke the rooms off.
6614. How far is the crosscut or engine plane driven down below that lower level? Sixty-nine yards.
6615. Then the coal was all standing solid between that level and the foot of the 69 yards? Yes.
6616. How many men were working down the dip on Monday? About eight.
6617. And there were four men in the lower level?—Were they portion of the eight that you have reckoned? They went down the dip.
6618. And they counted in the eight? No.
6619. Well, when there were eight down the dip, and three others, how many would there be? There would be eleven then.
6620. How many other men were there at work that day? That would be all there were in that day.
6621. And Bootle? Yes, that is twelve.
6622. And how many daymen? The road runner, fireman, engine-driver, and bottomer.
6623. What does the road runner do? He takes the empty wagons off, and hooks the full ones on.
6624. He does not ride in the wagons? No; we do not allow anyone to ride in them.
6625. What means had you of conveying the air from the west to the east side? The air course down the dip.
6626. How does the air cross the dip? With a brattice across the dip at present.
6627. A rag hanging down? Yes.
6628. And then it is carried along the level? Yes.
6629. How is it carried along? It comes in the west side of the road, and there is an air course 6 feet wide. It goes round, and as soon as I get the thing in working order I put a door up.
6630. But how do you carry the air round the level? It comes round the level, and goes down the new dip.
6631. How do you get it back? It comes through the west level.
6632. What creates the air course? The gob.
6633. What size is the air course? About 5 feet wide.
6634. And what height? It takes 3 feet and 3 feet 2 inch props.
6635. Is the gob air-tight? Yes.
6636. When the gob settles down do you bring it up again? Yes. As you go along you can soon feel where the air is escaping.
6637. You can; but do you? Yes.
6638. *By Mr. Rankin:* Did you never discover gas, or signs of gas, in the level where we were yesterday? Never.
6639. There was a lot of gas there then, you know? Yes.
6640. And that is the first you have ever seen there? Yes.
6641. Unless the gas has come away from that fall it seems strange that there should be a body of gas there, and you not see it before? That is where it came from. I drove the same level 30 yards, and it came off, and mind you there was no air there then.
6642. If there had been more air there I think the gas would have been seen before? There was a good breeze blowing where Bootle was; he said it was beautiful.
6643. And you never saw gas there before? No, I never saw a speck in any of the rooms.

6644. Had you been in that same level after the explosion before we went in? Yes, that is how I found the gas there.
6645. You took a safety lamp with you? Yes.
6646. Why did you take a safety lamp with you when you went down before? I would never go anywhere without a safety lamp where I heard a room rumbling.
6647. You thought the fall might liberate some gas, and that was the reason why you took a safety lamp with you? Yes. I have tried that place dozens of times; I was all round there on the Sunday morning right to where we went yesterday.
6648. *By Mr. Glassey:* What distance is that from the fall to where Mr. Rankin put down his lamp, and where the flame of the lamp tapered up, which was a clear indication of the presence of gas? Say about 100 yards. I could have told you if I could have seen the rooms, but I could not see them with those lamps.
6649. Are you satisfied that where the light tapered up yesterday there was gas? Yes.
6650. What distance is the place where we got fire in the lamp from where the accident occurred? About 8 yards.
6651. What distance would it be from the roof where the gas was distinctly discernible? About 3 inches.
6652. *By Mr. Rankin:* Fully a foot from the roof, I think? The wall is only about 6 inches, and I have always had to put my lamp above the wall.
6653. *By Mr. Glassey:* I am taking into account the height of the seam, and making allowance for a considerable heaving of the floor where we discovered gas yesterday. What distance do you think that would be from the roof? I should say the thickness of the brushing.
6654. Where we had a miniature explosion in Mr. Rankin's lamp, what distance would that be from the roof? It could not be above 8 inches.
6655. So that, as a matter of fact, there would be well nigh a foot or 14 inches of gas there? I do not think so; I would sooner say 6 or 8 inches.
6656. Taking the height of the lamp into account as well? Yes.
6657. At any rate, that place where we saw a considerable body of gas was about 8 yards from where the explosion occurred? Yes, as near as I can say.
6658. In all that area of ground in which the rooms have been worked out and the pillars have been left standing you say you have never seen gas? Never.
6659. Do you ever travel through there? I travelled along those three levels on the Saturday morning with a naked light.
6660. But have you ever travelled in those places that are left standing? No; the pavement is right up to the brushing there.
6661. Have you airways in those places? Yes, there is a good airway in No. 1 level.
6662. *By Mr. Fryar:* The airway from the engine to the upcast shaft is kept open? Yes.
6663. Do you ever go up there? Yes; I have been there several times, but not lately.
6664. Then, how can you write in your report that all is right if you have not travelled that airway lately? We do not use that as an air shaft.
6665. What do you use, then? We have a brick wall in the main shaft.
6666. From the furnace the air goes up alongside the downcast shaft? Yes.
6667. And the shaft to which I have referred is only for a means of escape in case of an accident? Yes; but they always call it the air shaft.
6668. *By Mr. Glassey:* You say there is a little water in your intake? Yes.
6669. What is the water there for? We have to keep trying to keep it down.
6670. In the main intake is there any water lying on the floor? Yes, I suppose there are 8 inches of water. The level has been driven a bit down below the hollow, and there is water in that hollow.
6671. What distance is that? I suppose it is about 15 or 20 yards long.
6672. So that the air has actually to travel over that water to reach the men? Yes.
6673. Are you aware that that is contrary to the Act? No.
6674. The air has not to travel through your old workings, stables, and over water, &c.? I always kept the water down until the pump broke down, but the old dip makes a terrible lot of water.
6675. Why should the water be there at all?—The air should be sent to the men in a pure state, they should not be asked to breathe polluted air? The water would not make the air polluted, it helps to cool it if anything.
6676. Leaving the main air course, and the water in it which is contrary to law, do you say that you examine the working places in the morning before the men enter? Yes.
6677. What distance is the station where the men are stopped from their working places during the examination? It depends upon where they are working. It is 50 yards down the dip.
6678. I want to know from you, as manager, what distance you keep the men away from any likelihood of danger until a report is made to them as to the safety or otherwise of their places? I keep them on the bottom stage.
6679. What distance is that from the nearest working places? Fifty yards.
6680. Do you consider that a safe distance to have the men while you are examining the mine with a naked light? I go down before them, and they undress and come down gradually. Perhaps I am not down long before some of them get down; there may be one or two get there.
6681. Is that a safe distance to keep the men away while you are examining the mine with a naked light, and may discover gas? No, but I had never seen any gas there before.
6682. I want to guard against the probability of disasters, and I wish to know do you think that is a safe distance to keep the men away while you are examining the mine with a naked light? No.
6683. Then, why do you keep the men in an unsafe place? Because I never saw anything to make it unsafe before.
6684. But you have seen that now? Yes.
6685. Supposing you kept those men there, and you examined the places with a naked light, and you came across a body of gas, what would happen? I suppose they would get burnt.
6686. And why do you run such risks? Well, I never saw anything in the pit before to show that there was any need to use a safety lamp.

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6688. *By Mr. Glassey:* You see it now? Yes.
30 May, 1900. 6689. In view of that, do you think you have been keeping these men in a safe place? No, I do not.
6690. You say when the explosion occurred there was a lot of dust and choke damp set free? I could not tell about choke damp. It was the dust I felt.
6691. And the dust was so thick that you could not bring the injured man up the engine plane? No.
6692. What distance would that dust be up the engine plane? It came out of No. 2 level, and went up.
6693. That is the level we went in by? Yes.
6694. And what would be the distance from there to where the man was injured? A couple of hundred yards.
6695. Do you mean to say that for a couple of hundred yards there was so much dust that you could not bring the man up? Well, dust is not a very nice thing to be travelling through.
6696. Then this enormous quantity of dust must have been raised by a very violent explosion from a large body of gas? That is a very dry part of the pit, and it does not take very much to set the dust going.
6697. At what time do you examine the places in the morning? I go down at about a quarter to 7.
6698. What time do the men go down? I could not say.
6699. How long after you? Straight away. They go to the bottom and undress.
6700. So that, practically speaking, you pretty well go down together? Yes.
6701. Do the men ever go into their working places before those places have been examined? Not that I know of.
6702. Have you ever found them doing so? No.
6703. Do you know that it is done? No.
6704. In examining these places do you make any mark to indicate that you have been there? Yes, I have a book there.
6705. I mean do you make any mark upon the working face or on the shovel? No.
6706. What guarantee then have the men that their places have been examined by you? They have none.
6707. Should they not have a guarantee? I think they ought to take a man's word.
6708. Should there not be some mark to show that the person responsible for the examination has actually made it? Yes, I should say that is only right.
6709. I think you said there were three men and eight men working in different places. What was the distance between those two bodies of men? I suppose there would be 150 yards at the nearest point.
6710. Do they all stop at one place waiting for your report? Yes.
6711. Is there any danger signal in your mine to show the men that they are not to go past certain places during the examination? We put a board up to show danger.
6712. But do you leave any mark to prevent a man passing certain points until there is a report of his place being safe? When there is any need to give a warning it has been written up in chalk.
6713. But is there anything done daily to prevent men passing along until their places are reported on? No, there has been no need for it.
6714. I think you said you had been making some openings—three of them—about 60 yards down the dip? Air holes.
6715. What size are those air holes? About 6 feet wide.
6716. Referring again to Mr. Fryar's report of 10th April; I presume that and other reports are made for your guidance? Yes.
6717. The inspector holds a very responsible position; he makes certain recommendations; why should they not be carried out? The use of the safety lamp is about the only one that I have let go.
6718. I think you said in answer to the Chairman that you always attend to the furnace fires on Sunday? Yes.
6719. Have you any stated time for doing so? Yes.
6720. You rake the fire over on Saturday? Yes.
6721. And when do you open it on Sunday? Five o'clock in the afternoon.
6722. Does the same rule hold good for holidays? Yes, with the exception of Christmas Day and Good Friday, when they have been neglected, and when we have not been working, of course, the fires went out.
6723. On the morning of the accident I think you said Mr. Bootle had disregarded your instructions? Yes.
6724. You told him not to go in there? Yes.
6725 Did you suspect it was unsafe on account of fire damp? It was not fire damp that I was afraid of; it was the creep.
6726. You did not instruct him not to go there on account of the danger from fire damp? Yes, I told him that, too. He went too near to where the brushing was coming down. I said, "Don't go there, Tom; if there happened to be any fire damp there you would set the place on fire." He said, "Nonsense, man." I said, "Well, you come away."
6727. Have you had much of that brushing coming down? Yes.
6728. Did you ever find gas there? No.
6729. Why did you suspect gas there on that occasion? Because we were so near the runner in the rock.
6730. You said you had struck faults in that mine on previous occasions? Yes.
6731. Did you ever see gas there? No.
6732. Why did you anticipate gas on that occasion when you had never seen it before? That was in consequence of what Mr. Fryar said.
6733. If it had not been for that warning you would not have anticipated it at all? No.
6734. And you said you had never discovered gas except a little patch in the roof about two years ago? Yes.
6735. Having discovered a small patch of it on that occasion, did it not strike you as necessary to examine the mine with a safety lamp in the morning? No, because the gas I saw was in a piece of slate in the old gob.
6736. But if you had examined the place that morning with a safety lamp you would have avoided the accident? I could not say.

R. Johnson. 30 May, 1900.

6737. What! you could not say that. The accident occurred at 8·30. Could gas accumulate in such a short time? I could not say that it did or that it did not.
6738. So that you think an examination of the place with a safety lamp would not have avoided the accident? I could not have got to examine it. It was not safe.
6739. At this place where the explosion occurred? No.
6740. Was Johnson's place closed as well as the other? You could not tell but what Johnson's was going as well as the other.
6741. Why? The creep was all over the place.
6742. Had that board of Johnson's been standing idle? It was worked out.
6743. And Mr. Bootle's place was worked out to the fault? Yes.
6744. What thickness of coal was between them? There were about 4 or 5 yards of pillars.
6745. Did any of the other men go into any of the adjoining places before you reported them safe? No; they went away.
6746. Mr. Bootle went to bring out his tools? He came to have a look at it. I said, "Tom, it is not safe; I would not go in there. It is not safe for you or any other man."
6747. You did not make a suggestion that you would rather find the cost of the tools than run any risk? No.
6748. *By Mr. Fryar:* Were there any other men in the mine besides those you have enumerated? Yes, the man who goes round in the morning. After he goes round he takes a safety lamp and goes through the old rooms above No. 1 level.
6749. Was he getting coal out of the bottom level? He was working above; he was not getting coal.
6750. *By the Chairman:* Was he working on the coal? No, he is a dayman.
6751. *By Mr. Fryar:* Were there any other men working on the coal than those you have already enumerated? Only Jack Brookes.
6752. *By the Chairman:* Where was he working? He was clearing a level out.
6753. *By Mr. Fryar:* That was not working on the coal? No.
6754. I asked you were there any other men working on the coal besides those you have already enumerated? No.
6755. *By Mr. Glassey:* I think you stated that Mr. Fryar warned you on more than one occasion that you were likely to meet with gas? Yes, about those faults.
6756. I think you also said that he cautioned you to be careful, more particularly on a Monday morning? Yes.
6757. So that this is not the first time that you have been warned that you were likely to meet with gas? No.
6758. And yet you went on examining the places with a naked light? The place has been going for sixteen years, and no gas had been seen in that seam before.
6759. *By Mr. Thomas:* Did Bootle go further than you had been that morning before the explosion took place? Yes, about 5 yards.
6760. And he did that against your instruction? Yes.
6761. So that it was his own fault that he went there? Yes.
6762. We want to know whether it was his fault or yours? I told him to go out.
6763. *By the Chairman:* And you say he went there against your strict instructions? Yes.
6764. *By Mr. Rankin:* Mr. Thomas asked you if you had been as far as where Bootle went previous to you and him going in together—had you been in before by yourself? Yes.
6765. How far did you go in then?—Did you go as far as Bootle was? No.
6766. You understood Mr. Thomas to ask you if you were 5 yards behind Bootle when you both went in? Yes.
6767. Had you been in there previous to that that morning by yourself? Yes.
6768. How far did you go in when you were by yourself?—Did you go as far as you were when you were in with Bootle? Yes.
6769. You went to about the same place? Yes.
6770. But not as far as he was? No.
6771. What kept you from going in?—Was it the rumbling noise of the roof coming down? Yes, and the coal working on the pillar.

EDWARD ROBERTS, miner, Waterstown Colliery, examined:

E. Roberts. 30 May, 1900.

6772. *By the Chairman:* How old are you? Twenty-one last 9th of November.
6773. How long have you been working in coal-mines? About four and a-half years here.
6774. How long have you worked in the Waterstown Colliery? I have been there most of the time. I have been twelve months away from Waterstown.
6775. Were you in the mine when the accident occurred last Monday? Yes, I was in the mine.
6776. What time did you go down? About 7 o'clock.
6777. Did you go down with the injured man Thomas Bootle? He went down the dip in front of me.
6778. When you got down to the bottom of the dip did you stop there? Yes, I stopped there.
6779. What were you waiting for? I was sitting there waiting for a wagon.
6780. Was it your custom to wait there until Mr. Johnson came and told you your place was safe? Yes.
6781. And did you always wait there? Yes.
6782. Did Mr. Johnson come to you that morning? Yes, he told me not to go into the working place.
6783. What did you do then? I just took the wagon along the level to the back, and left it there for the tools.
6784. That is, to the room where you were working? Yes.
6785. Where did you go then? Mr. Johnson sent me down the dip, further down to another place that I had been working in before with Bootle.
6786. Is that at the bottom of the dip? Yes.

E. Roberts. 30 May, 1900.

6787. When you went along the level with the wagon, where were Mr. Bootle and Mr. Johnson? Sitting just above the bag a bit.
6788. Is that along the level road? Yes.
6789. Is that as far as you went? Yes.
6790. And you left the wagon there and went down to the bottom of the dip? Yes.
6791. Were you at the bottom of the dip when the explosion occurred? Yes.
6792. Did you hear anything of the explosion? I just heard a sound; that is all.
6793. Had you any idea what that sound was? Well, I heard the other explosion that happened there before, and I thought it was the same kind of thing.
6794. Could you distinctly hear the sound? Yes.
6795. That would be, how far away? 150 yards, if not more.
6796. *By Mr. Rankin:* Was it a loud sound like a cannon going off? It did not sound so loud where we were.
6797. *By the Chairman:* Did the other men hear it? Yes.
6798. Did you talk over it as to what had happened? There was another young fellow sitting alongside of me, and he said it was gas.
6799. Did you run up to see? Yes, we ran up to see if they were hurt.
6800. Were you working in there on the Saturday before? Yes.
6801. And when you went down on Monday, did you expect to go into the same place again? Yes.
6802. Was it on account of the creep taking place that you were sent away to the dip? Yes.
6803. Did you see the injured man Bootle being brought up? Yes.
6804. Was he walking as he came along the level? Yes.
6805. While you were in the working place where the accident occurred, was the ventilation generally very bad? No, very good. I never rose a sweat when I was up at the face.
6806. How was the current of air brought up to the face? With the gobbing.
6807. Have you ever heard anything said about gas occurring in the mine? No.
6808. Have you ever heard any of the miners refer to it? No.
6809. Did you go up with your mate Bootle when he went to the hospital? No.
6810. Did you remain below? Yes.
6811. Then you did not see what took place on the surface? No.
6812. *By Mr. Rankin:* Did you go up the dip at all after you heard the sound? I went to see if anyone was hurt.
6813. Whom did you see? I saw Mr. Bootle and Mr. Johnson.
6814. Up on the level where they came up? Yes.
6815. Was there any dust or anything of that sort to be seen? Yes; there was a little bit of dust.
6816. Much? No, not much.
6817. Have you ever been where there was an explosion before? No.
6818. Was it a great quantity or only a little dust? Only a little.
6819. Nothing to stop you coming up the engine plane? No. The after-damp was three levels above where we were.
6820. *By the Chairman:* Did you come up there? No.
6821. *By Mr. Rankin:* You did not see it? No.
6822. Somebody told you it was there? Yes.
6823. They did not take the man who was injured up that way? No; they took him round the other way.
6824. *By Mr. Glassey:* Who was this young fellow who was with you? Cooper.
6825. You say he also heard that sound? Yes.
6826. And he knew it was gas because he had heard a similar explosion before? No; I said I had heard an explosion before.
6827. And you thought it was a similar sound? Yes.
6828. Did this young fellow say it was fire damp? He said it was an explosion of gas, and I had heard the sound of the explosion at the time Ferrier was burnt.
6829. Were you on the same seam? No; on the upper seam.

THOMAS FERRIER, engineer, examined:

T. Ferrier. 30 May, 1900.

6830. *By the Chairman:* Where are you working now? In Waterstown.
6831. How long have you been working there? Six years.
6832. Did you work anywhere before that? Not in a mine.
6833. During that time have you been working on the same seam that you are working on now? No; what little work I have done on the coal was on the stone-drive seam.
6834. Do you still work down below at Waterstown? Yes.
6835. What are you working as? I was working as a miner for about nine months, and I am engineer at present.
6836. Were you down the mine on the day of the explosion? Yes.
6837. At the time of the explosion? No.
6838. Where were you then? I was having breakfast on the top.
6839. Were you on the top when Bootle the injured man was brought up? No, I helped to bring him up.
6840. From where? From the bottom. I went down the return air-way with Mr. Thomas Johnson to look for the man we thought had met with the accident. We came back and went down the main air-way and went to where Bootle was, and we took him to the mouth of the shaft and then to the surface.
6841. Where did you meet him? When we got to Bootle he was at the bottom of the incline next to the last stage in the workings.
6842. Were you down the mine yesterday with Mr. Glassey and Mr. Rankin? Yes.
6843. Did you go into No. 2 level? Yes.
6844. Did you see any signs of inflammable gas there? Yes, I saw it on two of the lamps.

6845. Have you seen signs of gas there before? Yes.
6846. How long ago? I saw inflammable gas at the time they were driving the cross-cut about two years ago.
6847. Was there much? No. not a great lot. Something like six years ago, when I first went to work there, I saw it in the seam above.
6848. Have you ever seen gas previously in the place you saw it yesterday when in company with Mr. Rankin and Mr. Glassey? No, never before.
6849. What are your duties as engineer? To look after all the machinery.
6850. On the surface? Yes, and below. I go down below every morning to see that all the machinery is right before the firemen or any of the others take charge of their work.
6851. When you go below what machinery do you visit? The boilers first, then the cross-cut engine, and if the dip engine is going to be worked that day, I visit it.
6852 The dip engine is for drawing water? Yes.
6853. Are you in the habit of going down the cross-cut? Yes, sometimes.
6854. To examine the ropes and pulleys? Yes, and sometimes I go down to help put up doors.
6855. *By Mr. Rankin:* Did you ever hear of any gas being seen in the place where we were yesterday? No, not any there.
6856. But gas was discovered in there before we went in? Oh, yes.
6857. When was that? I could not tell you. All that I know is that the man who was burnt told me that he had seen a little blower light once somewhere near the same place.
6858. We were prepared for gas when we went in, and it must have been known that gas was there; Mr. Johnson or somebody else must have known that it was there. Had somebody been in that same level and seen gas before we went in? I suppose they had, but I do not know for sure. I was not told that they saw gas, but one would expect gas to come from there. Tom Johnson, and Richard Johnson, and J. Brookes went round those levels after the explosion on the day previous to your visit.
6859. They knew that the gas was there before we went in? Yes.
6860. They were in the day previous to our examination? Yes.
6861. And found out that gas was there? Yes, they knew it was there.
6862. Had they safety lamps with them? Yes.
6863. I expect they examined the place all round to see if there was any gas? Yes.
6864. *By Mr. Glassey:* Do you know who are the proprietors of the Waterstown Colliery? Yes, I believe the proprietors are the executors of the late J. Johnson———
6865. Who are they? Thomas Johnson and George Phie.
6866. Young George Phie, or old George Phie? The present George Phie, who is an engine-driver in the Railway Department.
6867. They are the proprietors, are they? Yes, and W. D. Sym, W. R. Black, and T. Johnson.
6868. With regard to the level we were in yesterday, called No. 2 level, do you know what is the distance from where Mr. Rankin tested the gas with his naked light to where the accident occurred? From 75 to 100 yards.
6869. Were you satisfied that that was gas which tampered up in Mr. Rankin's lamp? Yes.
6870. Have you ever seen that before? Yes.
6871. In the same mine? Yes, in the same mine, but not in the same seam.
6872. What distance were we when we discovered inflammable gas with the Davy lamp from where the accident occurred? I could not tell you, because I was not there.
6873. Concerning the gas which had been previously seen in the crosscut you have spoken of, that was about two years ago? Yes.
6874. Where was that gas seen? In a fall on the incline road.
6875. Was that fall an extensive one? It was not high. It was the brushing and blue stone that came down, and it went a good way, but did not go into the roof any depth.
6876. Was there much gas seen in that cross-cut? No, not a great lot; it was lit, but it did not cause an explosion.
6877. From that time to the present you have never seen gas in that same seam? No.
6878. Have you ever heard any of the men say that they had discovered gas in that same seam? No, not till this explosion occurred.
6879. I suppose you will admit that there was a considerable body of gas there yesterday? Yes.
6880. Where we found it, it was about 100 yards away from the scene of the accident? Yes.
6881. Have you ever been in the workings further to the left of where we were yesterday, to the rise of the level? Yes.
6882. Have you ever discovered any gas there? No.
6883. *By Mr. Rankin:* You said there was a fall in the main dip. Do you mean at the time we went down? Yes.
6884. Have there been many falls in that place? There is one big fall in it.
6885. There are some as much as 10 feet up? Yes, that was the place where gas was seen.
6886. *By Mr. Glassey:* In that level? Yes, there was gas seen coming from the side. The way it was seen first was this: A man standing on a wagon put a safety lamp into it and showed it.
6887. *By Mr. Rankin:* There was no explosion from that gas? No, it was a safety lamp that was used to show it.
6888. *By Mr. Glassey:* You say you examine the machinery and tackle below ground? Yes.
6889. Have you any fixed dates for your examination? I make a daily examination.
6890. Have you any particular day for specific examinations? No. When I make an examination if anything is required it is done straight away.
6891. Do you keep any book in which you enter reports of the condition of the machinery, etc.? I don't keep a book for reports on the condition of the machinery, but if a boiler is tested and anything is done to it, or a new chain is required, or new work is done to the engine, that is all entered in a report.
6892. Do you ever look at the inspector's report book to see what he says with regard to the condition of the boilers, the engine, and the tackle? Yes.
6893. Have you always carried out his instructions? Yes.

APPENDICES.

APPENDIX No. I.

ACCIDENT AT TORBANLEA COLLIERY.

Opinion of the four experienced miners selected by Warden Morey to sit with him at the Statutory Inquiry held at Torbanlea, on the 3rd April, 1900.

Howard Court House,
5th April, 1900.

We, the undersigned miners who sat with the Warden at Torbanlea on the 3rd instant, and have since visited the mine and seen the site of the accident, are of opinion that the five deceased miners came to their deaths by an explosion of gas, which we are of opinion was caused by a fall from the roof at a spot we found yesterday, situate about twenty-five yards from where the deceased were working. From the evidence given on the 3rd instant we know there were nine other men at work on the same dip, about fifty yards from where the five deceased were at work. These nine men were in the intake, and yesterday when we attempted to walk from where the nine men were to the scene of the explosion, we found about halfway along the aircourse a heavy fall blocked our passage in walking. This fall in our opinion liberated a quantity of gas, and we are further of opinion that this fall took place *after* the overman examined the workings the morning of the accident; and from the evidence of the overman we now think the fall occurred at the time he felt the current of air, and saw the flame of the explosion. We are of opinion that the accident was one that could not have been foreseen or provided against.

(Signed) JOHN McKINNON,
JOHN TENCH,
DANIEL RODERICK,
ROBERT RITCHIE.

APPENDIX No. II.

OUTPUT OF COAL FROM BURRUM AND IPSWICH COAL FIELDS FROM 1860 TO 1882.*

Year.	Tons.	Value.	Year.	Tons.	Value.
		£			£
1860	12,327	9,244	1873	33,613	22,052
1861	14,212	9,922	1874	43,443	19,700
1862	74,067	19,253	1875	32,107	14,835
1863	24,000	15,000	1876	50,627	26,470
1864	25,000	15,500	1877	60,918	25,659
1865	33,000	19,425	1878	52,580	21,272
1866	39,316	21,249	1879	55,012	22,759
1867	17,988	9,566	1880	58,052	24,573
1868	19,611	11,519	1881	65,612	29,033
1869	11,120	5,907	1882	74,436	33,592
1870	22,639	12,311			
1871	17,000	9,407			
1872	27,727	16,120	Total	864,407	£414,368

OUTPUT OF COAL FROM THE IPSWICH COAL FIELD.

1883	98,310	49,114	1893	202,429	86,582
1884	114,557	56,475	1894	207,672	81,201
1885	180,744	71,258	1895	239,712	89,150
1886	189,608	72,054	1896	280,094	106,740
1887	193,286	71,851	1897	277,172	97,411
1888	254,778	98,851	1898	310,444	103,927
1889	217,240	95,202	1899	373,655	127,305
1890	276,063	120,476			
1891	222,766	97,757			
1892	215,535	91,798	Total	3,854,065	£1,517,152

OUTPUT OF COAL FROM THE BURRUM COAL FIELD.

1883	6,440	3,870	1893	54,075	31,347
1884	6,150	3,550	1894	56,035	26,754
1885	26,914	14,950	1895	75,299	36,139
1886	39,048	23,189	1896	80,320	37,820
1887	45,527	25,609	1897	77,301	38,691
1888	56,634	30,096	1898	91,890	41,526
1889	48,267	25,916	1899	111,414	40,597
1890	58,781	32,926			
1891	42,516	24,003			
1892	42,268	24,494	Total	918,879	£461,477

* There is no separate record of the output from the Burrum and Ipswich Coal Fields prior to 1883, but calculating the yield from each field on the basis of the figures given for the years 1883 to 1899, inclusive, the output of the Burrum Coal Field from 1860 to 1882 would be about 172,881 tons, and that from the Ipswich Coal Field, about 691,526 tons.

APPENDIX No. II—*continued.*

OUTPUT OF COAL FROM THE BURRUM AND IPSWICH COAL FIELDS.

RECAPITULATION.

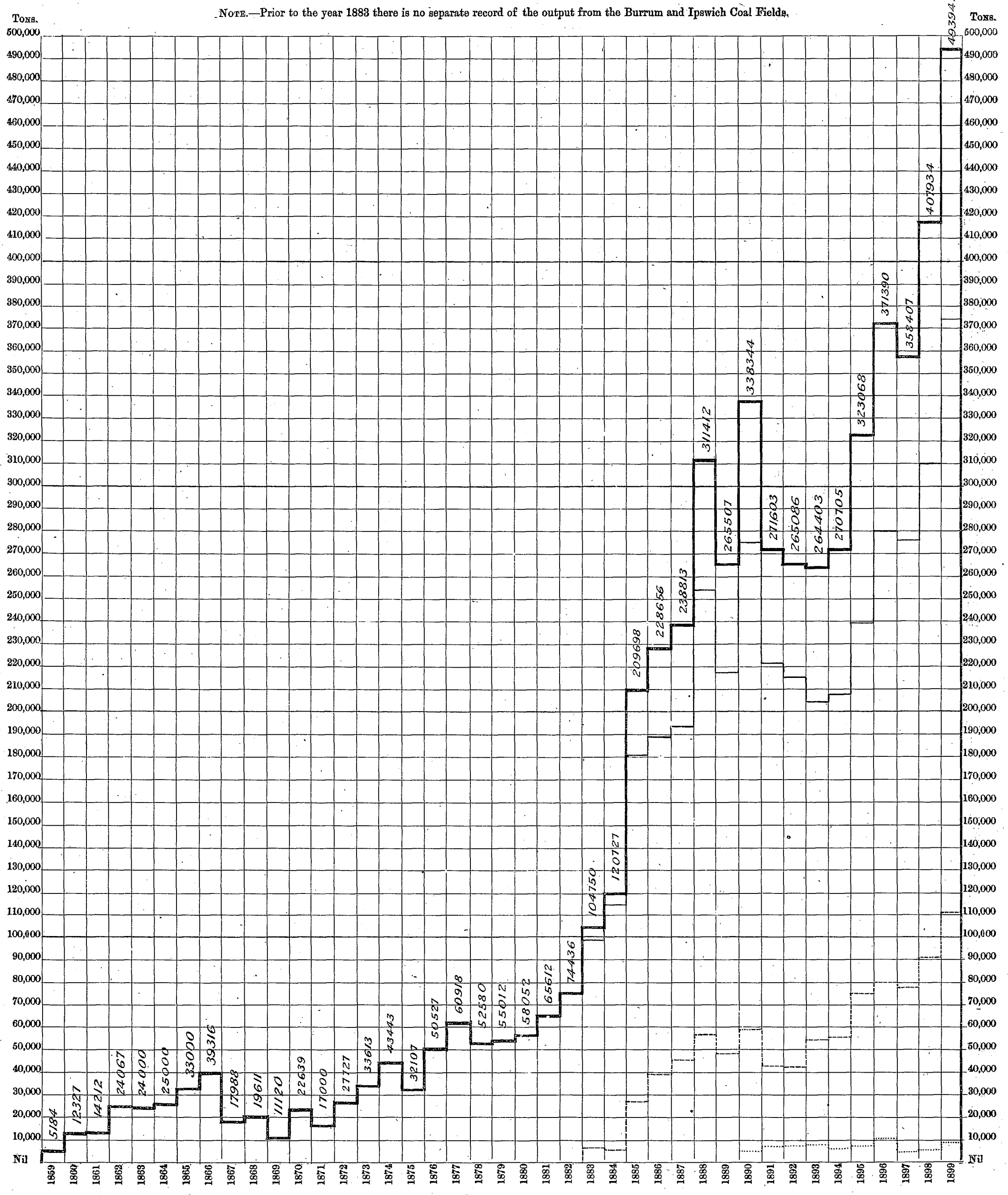
Name of Coalfield.	Years.	Tons.	Value.
			£
Includes both the Ipswich and Burrum Coal Fields ...	1860 to 1882	864,407	414,368
Ipswich Coal Field	1883 to 1899	3,854,065	1,517,152
Burrum Coal Field	1883 to 1899	918,879	461,477
Total	...	5,637,351	£2,392,997

Price 5s. 6d.]

By Authority: EDMUND GREGORY, Government Printer, William street, Brisbane.

Diagram showing the Output of Coal in Queensland from 1859 to 1899, inclusive. Black Lines show total output, Faint Lines that of Ipswich and Darling Downs, Broken Lines that of Wide Bay, and Dotted Lines that of Clermont.

NOTE.—Prior to the year 1883 there is no separate record of the output from the Burrum and Ipswich Coal Fields.



Appendix IV

PLAN
shewing the workings in
TORBANLEA COLLIERY
in which the explosion occurred on 21 March 1900

Scale 2 Chains to an Inch

0 1 2 4 6 8 10