

further discussion until the 12th inst. On the suggestion of Mr. Franklin, the paper entitled "The Ganges Canal, Upper India," was allowed to take precedence to the discussion.

The meeting then terminated.

12TH MAY, 1892.

MR. R. POLLOCK, PRESIDENT, in the Chair.

The following candidates were balloted for and duly elected:—

MEMBER:

P. N. CHRISTIE.

STUDENT.

F. R. SEABORN.

PAPER "The Ganges Canal, Upper India," by Mr. F. A. Franklin.—The President then called on Mr. Franklin to read his paper, which was illustrated by a series of large paintings and plans, for which the author was accorded a hearty vote of thanks on the motion of Mr. H. Broderick, seconded by Mr. Henson. On the motion of Mr. J. B. Henson, seconded by Mr. T. W. Seaver, it was resolved to adjourn the discussion until the 9th proximo.

DISCUSSION ON MR. A. W. TOURNAY-HINDE'S PAPER "THE ELECTRIC LIGHTING OF SYDNEY AND SUBURBS."—The hour being late, it was resolved to further postpone the discussion on this paper until the 19th inst.

The meeting then terminated.

19TH MAY, 1892.

MR. R. POLLOCK, PRESIDENT, in the Chair.

The President announced that the business for the evening was the discussion on Mr. Tournay-Hinde's paper "The Electric Lighting of Sydney and Suburbs," and as the mover of the adjournment (Mr. J. O. Callender) was absent, he called on Mr.

O. Haes to open the discussion. Mr. Haes read some remarks bearing on the paper, which had been sent him by Mr. Callender, and then criticised at some length the author's statements. The discussion was continued by Messrs. Dymond and Brain (visitors), J. S. Fitzmaurice, and the President, after which Mr. Tournay-Hinde replied to the various comments made on his paper.

The meeting then terminated.

9TH JUNE, 1892.

MR. R. POLLOCK, PRESIDENT, in the Chair.

The following candidates were balloted for and duly elected:—

MEMBERS:

D. FREW

W. E. MACQUARIE

JAMES VICARS

A. F. WILLIAMSON

J. HENDERSON.

DONATIONS.—The President announced that the Institute of Civil Engineers, London, had presented the Association with their Proceedings, dating back to the year 1884, and that in the future they intended forwarding them as they were published. Also that Mr. R. Laidley had donated Scott-Russell's work on Naval Architecture.

DISCUSSION ON MR. F. A. FRANKLIN'S PAPER "THE GANGES CANAL, UPPER INDIA."—Mr. A. D. Nelson opened the discussion, and was followed by Messrs. J. B. Henson, and T. W. Seaver. Mr. Franklin, in replying to the various comments, gave some interesting information regarding the advantages of irrigation, and referred to the success attained by the Messrs. Chaffey Bros.

PAPER "THE PRIESTMAN OIL ENGINE." by Professor D. C. Selman.—The President then called on Professor Selman to read his paper, which was illustrated with lantern views show-

ing the details of this type of engine. At its conclusion, Mr. A. D. Nelson moved, seconded by Mr. W. D. Cruickshank, that a hearty vote of thanks be accorded Professor Selman for his interesting paper. Carried. On the motion of Mr. J. S. Fitzmaurice seconded by Mr. F. A. Franklin, it was resolved to adjourn the discussion until the 14th proximo. Professor Selman invited the members to be present at the Technical College on the 9th proximo, to witness a series of tests which were to be carried out with the Priestman Engine.

The meeting then terminated.

14TH JULY, 1892.

MR. R. POLLOCK, PRESIDENT, in the Chair.

The following candidates were balloted for and duly elected:—

MEMBERS:

PERCY DAVIS

LINCOLN BUSWELL.

DISCUSSION ON PROFESSOR D. C. SELMAN'S PAPER "THE PRIESTMAN OIL ENGINE."—The President called on Mr. J. S. Fitzmaurice, the mover of the adjournment, to open the discussion. Messrs. W. D. Cruickshank and R. Pollock also took part in the discussion, after which Professor Selman replied to the remarks of the various speakers.

PAPER "NOTES ON THE COMPARATIVE ADVANCEMENT MADE IN MARINE ENGINES AND HIGH DUTY PUMPS DURING THE PAST FIFTY YEARS," by Mr. Norman Selfe.—The President then called on Mr. Selfe to read his paper. At its conclusion, on the motion of Mr. W. D. Cruickshank, seconded by Mr. G. Fischer, a hearty vote of thanks was accorded the author for his valuable paper. On the motion of Mr. L. C. Auldjo, seconded by Mr. Fischer, it was resolved to adjourn the discussion until the 11th proximo.

The meeting then then terminated.

ing the details of this type of engine. At its conclusion, Mr. A. D. Nelson moved, seconded by Mr. W. D. Cruickshank, that a hearty vote of thanks be accorded Professor Selman for his interesting paper. Carried. On the motion of Mr. J. S. Fitzmaurice seconded by Mr. F. A. Franklin, it was resolved to adjourn the discussion until the 14th proximo. Professor Selman invited the members to be present at the Technical College on the 9th proximo, to witness a series of tests which were to be carried out with the Priestman Engine.

The meeting then terminated.

14TH JULY, 1892.

MR. R. POLLOCK, PRESIDENT, in the Chair.

The following candidates were balloted for and duly elected:—

MEMBERS:

PERCY DAVIS

LINCOLN BUSWELL.

DISCUSSION ON PROFESSOR D. C. SELMAN'S PAPER "THE PRIESTMAN OIL ENGINE."—The President called on Mr. J. S. Fitzmaurice, the mover of the adjournment, to open the discussion. Messrs. W. D. Cruickshank and R. Pollock also took part in the discussion, after which Professor Selman replied to the remarks of the various speakers.

PAPER "NOTES ON THE COMPARATIVE ADVANCEMENT MADE IN MARINE ENGINES AND HIGH DUTY PUMPS DURING THE PAST FIFTY YEARS," by Mr. Norman Selfe.—The President then called on Mr. Selfe to read his paper. At its conclusion, on the motion of Mr. W. D. Cruickshank, seconded by Mr. G. Fischer, a hearty vote of thanks was accorded the author for his valuable paper. On the motion of Mr. L. C. Auldjo, seconded by Mr. Fischer, it was resolved to adjourn the discussion until the 11th proximo.

The meeting then terminated.

11TH AUGUST, 1892.  
 MR. R. POLLOCK, PRESIDENT, in the Chair.

The following candidates were balloted for and duly elected:—

**MEMBERS:**

A. M. MACBETH

JAMES NANGLE.

The President stated that in consequence of the size of the current volume of Proceedings, and the large number of plates, the Council regretted that they could not publish the various designs submitted in the Waverley Pump Competition, on account of the heavy expense which would be incurred thereby. They had decided to publish the accepted design, but he would like to have the feeling of the meeting on the subject.

**ANNUAL RE-UNION.**—On the motion of Mr. A. D. Nelson, seconded by Mr. J. I. Haycroft, it was unanimously resolved that the Annual Re-union be held in the shape of a picnic on the Saturday following the General Meeting in October.

**DISCUSSION ON MR. NORMAN SELFE'S PAPER "NOTES ON THE COMPARATIVE ADVANCEMENT MADE IN MARINE ENGINES AND HIGH DUTY PUMPS DURING THE PAST FIFTY YEARS."**—The President called on Mr. L. C. Auldjo, the mover of the adjournment to open the discussion, who, after having criticised the various designs, was followed by Messrs. A. Christie, J. Trevor-Jones, J. Grimshaw (visitor), R. G. Edgell, W. D. Cruickshank, T. H. Houghton (visitor), and the President. The hour being late, it was resolved on the motion of Mr. T. Irons, seconded by Mr. G. Fischer, to adjourn the further discussion of this paper to the 25th inst.

The meeting then terminated.

25TH AUGUST, 1892.

MR. R. POLLOCK, PRESIDENT, in the Chair.

ADJOURNED DISCUSSION ON MR. NORMAN SELFE'S PAPER  
 "NOTES ON THE COMPARATIVE ADVANCEMENT MADE IN MARINE

ENGINES AND HIGH DUTY PUMPS DURING THE PAST FIFTY YEARS."—Mr. T. Irons, the mover of the adjournment continued the discussion, after which Mr. Selfe replied at considerable length to the remarks of the various speakers.

PAPER "The Automatic Hydraulic Governor," by Mr. A. J. Duncan.—The President stated that Mr. Duncan resided in Melbourne, and was unable to come to Sydney to read his paper, and that Mr. G. Fischer had kindly undertaken this duty. Mr. Fischer then read the paper and explained the features of the invention. After which, Mr. Norman Selfe moved, seconded by Mr. W. D. Cruickshank, that a vote of thanks be accorded Mr. Duncan for his interesting paper, and to Mr. Fischer for reading same. Carried.

The meeting then terminated.

---

8TH SEPTEMBER, 1892.

MR. R. POLLOCK, PRESIDENT, in the Chair.

APPOINTMENT OF AUDITORS.—On the motion of Mr. Haycroft seconded by Mr. Auldjo Messrs. James Elder and Gaius Clarke were appointed Auditors to examine the accounts of the Association for the year.

DISCUSSION ON MR. A. J. DUNCAN'S PAPER "THE AUTOMATIC HYDRAULIC GOVERNOR"—The discussion was opened by some written remarks of Mr. A. W. Tournay-Hinde, Messrs. J. S. Fitzmaurice, H. W. Kerle, and the President also took part in the discussion.

PAPER "Notes on the use of Iron and Steel in Building Construction," by Mr. J. W. Ashcroft. The President then called on Mr. Ashcroft to read his paper, after which, on the motion of Mr. J. I. Haycroft, seconded by Mr. A. M. Howarth, a hearty vote of thanks was accorded the author, and it was resolved to postpone the discussion to the 22nd inst.

The meeting then terminated.

22ND SEPTEMBER, 1892.

MR. R. POLLOCK, PRESIDENT, in the Chair.

DISCUSSION ON MR. J. W. ASHCROFT'S PAPER "NOTES ON THE USE OF IRON AND STEEL IN BUILDING CONSTRUCTION."—The President called on Mr. J. I. Haycroft, the mover of the adjournment, to open the discussion. Messrs. Dauncey (visitor), G. Ashcroft, J. P. Power (visitor), W. D. Cruickshank and the President, followed, after which, Mr. Ashcroft having replied to the various comments, the meeting terminated.