

PAPERS READ AND DISCUSSED—1870-1920.

- The first paper read before the Association.
- “Fowler’s System of Narrow Gauge Railways” (original read before British Association), by Mr. Laing.
- “Suspension Bridge Without Fixed Platform,” by Mr. F. T. Rose (first original paper before Association).
- Apr. 1871.—On the Effect of Pressure on the Temperature of Fusibility, Deducing Therefrom the Probable Thickness of the Earth’s Crust.—Mr. Downing.
- May /71.—Compound Engines: Their History and Progress.—Mr. Norman Selfe.
- Aug. /71.—Marine Boilers.—Mr. Cruickshank.
- Nov. /71.—Warsop Aero Engine.—Mr. Laing.
- Jan. 1872.—The Treatment of Gold Deposit and the Apparatus and Machinery of the Gold Fields.—Mr. Wilson.
- Apr. /72.—The Recommendation of Colonial Material to the Manufacture of Machinery.—Mr. McCroll.
- June /72.—Hydraulic Propulsion.—Mr. Laing.
- Sept. /72.—Alterations to Steamer “Leichhardt.”—Mr. G. Davidson.
- Feb. 1873.—Manufacture of Iron.—Mr. Downing.
- Apr. /73.—Steel.—Mr. Scott.
- July /73.—“Heat and Its Relation to Motive Power.”—Mr. Davis.
- Oct. /73.—“Some Remarks on the Connection Between Labour-saving Machinery and Education Question, with a Description of a Coal-getting Machine.”—Mr. N. Selfe.

- Feb. 1874.—Smoke-consuming Contrivances.—General Discussion.
- May /74—Discussion: What Material is the Most Suitable for Construction and Extension of the Sydney Wharf Accommodation?—It was decided that “Stone for Retaining Walls and Hardwood for Jetties and Docks were the Most Suitable.”
- Aug. /74—Discussion: “Best Proportions for Rivetted Joints in Boilers.”
- Nov. /74—Discussion: “Best Form of Land Boiler.”
- Jan. 1875.—“Tifford’s Injector.”—Mr. Cruickshank.
- Mar. /75—Discussion: High Pressure Boilers (50 lbs. per sq. inch) versus Low Pressure (10 lbs. per sq. inch).
- June /75—Manufacture of Bessemer Steel.—Mr. Davies.
- Sept. /75—Steam Launches.—Mr. N. Selfe.
- Nov. /75—Retters Water Scheme at Frieberg in Switzerland.—Mr. Davies.
- March. 1876—Freeboard of Iron Steamships.—Mr. Davidson.
- June /76—The Value of Different Samples of Australian Coal.—Mr. Davies.
- Oct. /76—Scheme for the Water Supply of Sydney.—N. Selfe.
- Oct.-Dec. /76—The Meetings were in Connection with Technical Education.
- May 1877—Discussion: Compound v. Single Cylinder Expansion Engine.

1877—Meetings during this year seem to have greatly waned in interest. Some meetings did not have any particular business except elections before them, and several meetings lapsed for want of a quorum.

- Oct. /77—"Modern Workshop Appliances."—Mr. Blackett.
- Nov. /77—Treatment of Salt and Fresh Water in Steam Boilers.—Mr. Cruickshank.
- Jan. 1878—Discussion: Punching v. Drilling of Boiler Plates.
- Feb. /78—Discussion: Wrought Iron Water Pipes.
- Mar. /78—Discussion: Strength of Cold v. Hot Iron in Boiler Plates.
- Apr. /78—Diamond Drills.—Mr. Humphreys.
- June /78—Sugar Manufacture and its Machinery in N.S.W.—Mr. Mainwaring.
- Jan. 1879—"Screw Propulsion."—Mr. Waugh.
- Mar. /79—Discussion: Machinery for Flour Mills.—Mr. Waugh.
- Apr. /79—Land Boilers and Their Inspection.—Mr. Blackett.
- Aug. /79—Influence of Steam on Industries and Social Progress.—Mr. J. Laing.
- Oct. /79—Refrigeration.—Mr. Downe.
- Jan. 1880—Jacketting Steam Cylinders.—Mr. Humphreys.
- Apr. /80—Feathering Floats of Paddle Wheels.—Mr. O'Dwyer.
- May /80—Continuous Beam Bridges.—Mr. I. W. Fowler.
- Nov. /80—Heat and Cold.—Mr. Humphreys.
- Dec. /80—Strength of Shafting.—Mr. Cruickshank.

- Mar. 1881—Refrigeration.—Mr. Downe.
- Apr. /81—Heat.—Mr. Cohen.
- May. /81—Automatic Hydraulic Ram.—Mr. Kirkwood.
- July /81—Railway Signalling and Interlocking.—Mr. Parry.
- Aug. /81—Wool Pressing Machinery.—Mr. Humphreys.
- Sept. /81—Automatic Fire Extinguishers.—Mr. Snell.
- Oct. /81—Electrical Transmission of Power at Mort's Dock.—Mr. Maguire.
- Dec. /81—Sea a Source of Power.—Mr. Snell.
- Mar. 1882—Storage of Water.—Mr. Wright.
- May /82—Corrosion in Steam Boilers.—Mr. Cruickshank.
- Nov. /82—Pumping Machinery.—Mr. Blackett.
- Dec. /82—Lifts.—Mr. Cracknell.
- Jan. 1883—Tramway Rails.—Mr. O. Blackett.
- Feb. /83—Pumping Machinery for Hunter District of N.S.W.—Mr. Davis.
- Apr. /83—Breakwaters and Bar Harbours.—Mr. Kirkwood.
- May /83—Tramways.—Mr. Wright.
- Sept. /83—Light Railways.—Mr. Shellshear.
- Dec. /83—Steam Motors on Tramways.—Mr. Laing.
- Mar. 1884—Road Improvement in Sydney.—Mr. Mountain.
- Apr. /84—Graphic Method of Analysing the Action of Slide Valves.—Mr. Fischer.
- June /84—Barker's Hydraulic Brake.—Mr. Harris.
- July /84—Street Traffic on Rails.—Mr. Mackay.
- Dec. /84—Pneumatic System of Sewage.—Mr. Fischer.

- Feb. 1885—Hydraulic Lifts.—Mr. Kerle.
- Mar. /85—Graphic Statics and Their Application to the Determining of Strains in Framed Structures.—Mr. Bergin.
- May /85—Mechanical Dairying.—Mr. Waugh.
Modern Weapons and Our Defences.—Mr. Shellshear.
- June /85—Connecting Sydney with North Shore by Means of a Subway or Tunnel.—Mr. Rock.
- July /85—Inoffensive Destruction of Nightsoil and City Refuse.—Mr. Fischer.
- Aug. /85—Continuous Girder Bridges.—Mr. E. C. Wood.
- Sept. /85—Flour Mill Machinery.—Mr. Kerle.
- Dec. /85—Metallurgy of Copper.—Mr. C. Van de Velde.
- Jan. 1886—Simultaneous Telegraphic and Telephonic Communication by Means of the Conducting System.—Mr. Leahy.
- Feb. /86—Healthy Dwellings.—Mr. J. Smail.
- Mar. /86—Compressed Air and its Applications.—Mr. N. Selfe.
- Apr. /86—Breakwaters and Training Jetties.—Mr. Shellshear.
Use of Concentrated Solutions of Soda for Raising Steam.—Mr. Wageman.
- May /86—Agricultural Engineering.—Mr. Angus Mackay.
Our Colonial Built Harbour Steamers.—Mr. N. Selfe.
- June /86—Metallic Deposits.—Mr. Bergin.
- July /86—Bell Process of Ice Making.—Mr. Bagshaw.

- Aug. /86—Economy in Steam Navigation.—Mr. W. Bailey.
- Sept. /86—Notes on Portland Cement.—Mr. A. C. Mountain.
- Dec. /86.—Combustion.—Mr. E. C. Stables.
- Jan. 1887—Electric Lighting.—Mr. J. Stewart.
- Feb. /87—Strength of Building Materials.—Prof. W. H. Warren.
- Mar. /87—The Converging Jetty System for the Removal of Bars from the Entrance to the Rivers of N.S.W.—Mr. W. Shellshear.
- May /87—The Sanitary Aspect of the Site of the Metropolis and its Environs.—Mr. J. B. Hewson.
- June /87—North Illawarra Ocean Jetty.—Mr. H. W. Kerle.
- July /87—Contrast Between Marine Engineering in 1837 and Present Time (1887).—Mr. W. G. Wilson.
- Aug. /87—Railway Brakes.—Mr. N. Selfe.
- Nov. /87—President's address.—(Mr. Cruickshank).
- Dec. /87—The Shone Hydro-pneumatic System of Sewage.—Mr. J. B. Hewson.
Also one on same subject by Prof. W. H. Warren.
- Jan. 1888—Fresh Water Distiller.—Mr. Auldjo.
- Apr. /88—Our Harbour Steamers.—Mr. N. Selfe.
- June /88—Some Mechanical Aspects of Metalliferous Mining in Australia.—Dr. Storer.
- July /88—Triple Effect Apparatus for Evaporating Sugar Solutions.—Mr. Hector Kidd.

- Aug. /88—Atlas Engineering Co.'s Pontoon Dock.
—Mr. J. R. Thompson.
- Sept. /88—Some Remarks on the Proposed Scheme
for the Western Suburbs Sewerage.—
Mr. J. B. Hewson.
- Dec. /88—President's Address.—(Mr. A. D.
Nelson.)
- Jan. 1889—Modern Tendency of Railway Practice.
—Mr. W. Shellshear.
- Jan. /89—Remarks on the Hawkesbury-Nepean
Alluvial Deposit and Irrigation.—Mr.
J. B. Hewson.
- Feb. /89—The Pumping Machinery for the Water
Supply of Sydney and Irrigation.—
Mr. N. Selfe.
- Mar. /89—Coating Iron and Steel with Copper.—
Dr. Florence.
- Apr. /89—Sanitary Improvements.—Mr. E. W.
Crackwell.
- May /89—Some N.S.W. Timbers.—Mr. Maiden.
Davis Patent Smoke Consumer and
Fuel Economiser.—Mr. Key.
- July /89—Flour Milling Machinery.—Mr. A. D.
Nelson.
- Aug. /89—A Simple Method of Extracting Gold
and Silver From Pyrites by Wet Pro-
cess.—Dr. Storer.
- Water Gas.—Mr. J. W. Rock.
- Sept. /89—Operations of Power Companies and
Power Transmission by Compressed
Air.—Mr. N. Selfe.
- Oct. /89—Epicyclic Grab Dredges.—Mr. H. Davies.

- Mar. 1890—President's Address.—(Mr. A. D. Nelson).
- Apr. /90—Prevention of Damage to River Banks by Flood Waters and Regulation of River Channels.—Mr. Seymour Wells.
- May /90—Van Rysselbergh's Hydro-dynamo System of Electric Lighting.—Mr. Van de Velde.
- June /90—Electric Traction.—Mr. Fischer.
- July /90—Sanitary Engineering and Public Health. Mr. J. M. Smail.
- Aug. /90—Delta Metal.—Mr. Walter Reeks.
- Sept. /90—Dangers Arising from the Use of Clays in Dam Embankment.—Mr. Angus Mackay.
- Oct. /90—Portland Cement and Its Manufacture from Local Materials.—Mr. J. B. Hewson.
- Mar. 1891—President's Address.—(Mr. A. D. Nelson.)
- Apr. /91—The Injector: How and Why It Works.—Mr. W. D. Cruickshank.
- July /91—The Engineering Aspect of Local Self Government.—Mr. T. W. Seaver.
- Aug. /91—Railway Gauges.—Mr. C. Van de Velde.
- Sept. /91—Treatment of Silver Ores.—Mr. Ashcroft.
- Railway Brakes.—Mr. N. Selfe.
- Oct. /91—Underground Electric Light Mains.—Mr. J. O. Callender.
- Mar. 1892—A Review of Marine Engineering During the Past Decade.—Mr. A. Blechyn-den (in Inst. Mech. Eng. re-read before Assoc.—Mr. Cruickshank).

- Apr. /92—Electric Lighting of Sydney and Suburbs.—Mr. Tourney Hinde.
- May /92—The Ganges Canal, Upper India.—Mr. Franklin.
- June /92—The Priestman Oil Engine—Professor Selman.
- July /92—Notes on the Comparative Advancement Made in Marine Engineering and High Duty Pumps during the Past 50 Years.—Mr. N. Selfe.
- Aug. /92—Hydraulic Governors.—Mr. Duncan.
- Sept. /92—Notes on the Use of Iron and Steel in Building Construction.—Mr. Ashcroft.
- Oct. /92—Notes on Dynamo Driving by Compound Engines.—Mr. Diamond.
- Mar. 1893—President's Address.—(Mr. R. Pollock.)
- Apr. /93—Some Notes on the Design of Railway Fish Joints.—Mr. A. M. Howarth.
- May /93—Some Notes on the Ornamental Treatment of Bricks and Iron in N.S.W.—Mr. J. Nangle.
- June /93—Relative Position of the Architect, Engineer, and Builder in Modern Works.—Mr. N. Selfe.
- Aug. /93—Railway Brakes.—Mr. Morse.
- Sept. /93—Cable Tramway Machinery.—Mr. I. Irons.
- Oct. /93—Refrigeration and Ice Making Machinery.—Mr. R. Sinclair.
- Mar. 1894—President's Address.—(Mr. R. Pollock.)
- May /94—Some Improvements in Treating Minerals for the Wet and Dry Processes.—Dr. Storer.

- May /94—Notes on Hydraulic Power Supply.—
Mr. T. Dickenson.
- July /94—Bricks and Brickmaking.—Mr. Jas.
Nangle.
- Aug. /94—Double Ended Screw Ferry Steamers.—
Mr. W. Reeks.
- Oct. /94—The Rise and Progress of Lift Construc-
tion in N.S.W.—Mr. N. Selfe.
- Mar. 1895—President's Address.—(Mr. A. D.
Nelson.)
- May /95—Mechanical Refrigeration with Details of
an Ammonia Compression Machine,
and Details of Various Methods of
Refrigeration.—Mr. L. C. Auldjo.
- July /95—Hot Water Supply and Circulation to
Large Building.—Mr. W. J. Napier.
- Aug. /95—Roof Coverings.—Mr. Jas. Nangle.
- Sept. /95—A Proposed Sub-aqueous Viaduct across
Sydney Harbour from Dawes Battery
to Milson's Point.—Mr. A. M.
Howarth.
- Mar. 1896—President's Address.—(Mr. A. D.
Nelson.)
- Apr. /96—Description of the Impounding Reser-
voir, Condensing Apparatus, and
Cooling Tower for the Water Supply
at Childers' Sugar Factory, Queens-
land.—Mr. Hector Kidd.
- June /96—Cook's River: Its Condition and Des-
tiny.—Mr. H. B. Henson.
- Aug. /96—Monier Structures.—Mr. A. E. Cutler.
Thistle Mechanical Milking Machine.—
Mr. W. B. Dick.
- Sept. /96—Mergenthaler Linotype Machines.—Mr.
H. Franks.

- Mar. 1897—President's Address.—(Mr. A. D. Nelson.)
- Apr. /97—Australasian Telegraphs.—Lt.-Col. P. B. Walker.
- May /97—Some Notes on Fireproof Buildings.—Mr. Jas. Nangle.
- June /97—Refrigeration (Communicated).—Mr. W. Napier.
- Sept. /97—The Monier System and Its Uses.—Mr. J. Baltzer.
- Mar. 1898—Boiler Settings for Refrigerating and Other Houses.—Mr. N. Selfe.
- May /98—Instrumental Calculation as Applied to Modern Engineering.—Mr. E. F. Stowe.
- Aug. /98—Some Notes on Sydney Building Stones.—Mr. Jas. Nangle.
- Mar. 1899—President's Address.—(Mr. H. B. Howe.)
Practical Experience with Acetylene Gas.—Mr. W. Tyree.
- May /99—Recent Improvements to Mort's Graving Dock, Balmain.—Mr. A. Christie.
- June /99—Methods of Preventing the Loss of Heat Contained in the Condensed Water, Collected from Vessels Using Steam for Heating and Evaporating Purposes.—Mr. Hector Kidd.
- July /99—Notes on the Testing of Materials at the P. N. Russell Laboratory, with Special Reference to Nickel Steel.—Prof. W. H. Warren.
- Sept. /99—Some Notes on the Wear and Tear of Steamers.—Mr. J. C. McAllister.

- Mar. 1900—President's Address.—(Mr. H. B. Howe.)
- Apr. /00—Sydney and Its Institutions as They Are and Might Be, from an Engineer's Point of View.—Mr. N. Selfe.
- May /00—The Latest Improvements in Acetylene Gas.—Mr. W. Tyree.
- June /00—Silver-lead Ore Mining, and the Various Systems of Stopping and Timbering Employed in Broken Hill, N.S.W.—Mr. E. K. Beaumont.
- July /00—Brewery Engineering: Its Development and the Degree of Perfection It Has Reached in Various Countries.—Mr. A. Metzler.
- Aug. /00—Sydney and Suburbs Low Level Sewerage.—Mr. A. E. Cutler.
- Oct. /00—The Deep Sinking of Shafts at Sydney Harbour Colliery, Balmain, Sydney, N.S.W.—Mr. J. L. C. Rae.
- Mar. 1901—President's Address. — (Mr. Hector Kidd.)
- Apr. /01—A Method of Balancing Revolving and Reciprocating Weights in Locomotives, as Applied to Inside Cylinder Engines.—Mr. John Scoular.
- May /01—Smoke Prevention and Economical Steam Raising as Attained by the Meldrum Patent Forced Draught System.—Mr. J. M. Meldrum.
- Sept. /01—Topical Discussion: Notes on the Efficiency of Screw Bolts and Their Application to Steam Pipe Flanges and Other Uses.—Messrs. Hector Kidd and H. J. Diamond.

- Mar. 1902—President's Address. — (Mr. Hector Kidd.)
- Apr. /02—Notes on Concrete.—Mr. Hector Kidd.
- June /02—Notes on the Efficiency of Lifting Tackle.—Mr. James Shirra.
- Aug. /02—Some Remarks on an Australian Marble Cutting Machine.—Mr. Norman Selfe.
- Sept. /02—Observation upon Shipbuilding and Engineering Practice on the Clyde.—Mr. C. McAlister.
- Mar. 1903—President's Address.—(Mr. J. L. C. Rae.)
- Apr. /03—The Absence of Economy in Manufactures in Australasia, Especially Dealing with the Motive Power End.—Mr. R. S. Vincent.
- June /03—Some Notes on Water Tube Boilers.—Mr. A. E. Lea.
- Aug. /03—Feed Water Heaters.—Mr. Jas. Shirra.
- Sept. /03—Thermit Welding.—Mr. O. Granowski.
- Mar. 1904—President's Address.—(Mr. J. L. C. Rae.)
- Apr. /04—Notes on Irrigation.—Mr. E. J. Clarkson.
- June /04—Oil Engines.—Mr. Gustave Ey.
- Sept. /04—Description of an Irrigation Plant on a Bundaberg Sugar Plantation.—Mr. Jas McGechan.
- Oct. /04—Water or Producer Gas Applied to the Arts of Manufacture.—Mr. John Fell.
- Mar. 1905—President's Address. — (Mr. John Scoular.)

- Apr. 1905—Jeffrey Chain Coal Cutting Machine.—
Mr. J. W. Bragg.
- July /05—Modern Lighthouse Illumination.—Mr.
Jas. Shirra.
- Aug. /05—The Suction Gas Producer: Its Develop-
ment and Economical Application.—
Mr. K. E. Forkel.
- Mar. 1906—President's Address. — (Mr. W. H.
German.)
- Apr. /06—Electric Power and Transmission in
Works and Factories.—Mr. E. J.
Erskine.
- June /06—A Century of Bridge Building and the
Great Sydney Bridge Competitions,
with a Description of the Foundations
of the Accepted Design.—Mr. Norman
Selfe, M.I.C.E.
- July /06—Double Ended Single Screw Steamers.—
Mr. Walter Reeks.
- Sept. /06—Reinforced Concrete Construction.—
Prof. W. H. Warren, Wh.Sct.,
M.Inst.C.E., M.A.M.Soc.C.E., Challis
Professor of Engineering, University
of Sydney.
- Mar. 1907—President's Address. — (Mr. Russell
Sinclair.)
- Apr. /07—Machinery for Double Ended Screw
Steamers.—Mr. Russell Sinclair.
- July /07—The Parsons Steam Turbine.—Mr. W.
- Aug. /07—Experiment with S.S. "Kookooburra."
H. Grieve.
—Mr. Russell Sinclair.
- Oct. /07—Economy of Fuel.—Mr. J. W. Bragg.

- Mar. 1908—President's Address. — (Mr. Jas. Shirra.)
- Apr. /08—(a) A Comparison on the Strengths of the Principal Compression Members in Three (3) Notable Bridges.—Mr. Norman Selfe.
 (b) Notes on the Application of Mechanical or Acceleration Draught to Steam Boiler to Increase Their Efficiency and Steaming Capacity.
- June /08—Description of a Molasses Burning Furnace.—Mr. W. H. German.
- Aug. /08—The Technical College in Relation to the Apprentice.—Mr. J. W. Turner.
- Oct. /08—Impact Tests: Hardness, Toughness, and Brittleness.—Prof. W. H. Warren, M.I.C.E., M.Am.Soc.C.E., Wh.Sct., Member of the International Society for Testing Materials, Challis Professor of Engineering.
- Mar. 1909—President's Address.—Mr. Jas. Shirra.
- Apr. /09—The Coolgardie Water Supply Scheme.—Mr. R. J. Vincent.
- May /09—Labour Saving Devices.—Mr. G. A. Julius, B.Sc., M.E.
- June /09—(a) On the Growth of Algae in Reservoirs and How to Treat It.—Mr. Jas. Faulkner.
 (b) Notes on Some Modern Methods of Steamship Construction.—Mr. Walter Reeks.
- July /09—Description of a New Zealand Coal Mine. Mr. C. J. Holroyde.
- Aug. /09—Some Notes upon the Design and Use of Speed Reducing Gear.—Mr. Henry Shaw and Mr. Jas. McNamara.
- Sept. /09—The Commercial Motor Vehicle.—Mr. E. F. Boulton.

- Mar. 1910—President's Address. — Mr. E. J. Erskine.
- Apr. /10—Pneumatic Tools.—Mr. A. P. Smith.
- May /10—Some Notes on the Transport of Molasses in Bulk.—Mr. W. H. German.
- June /10—Rotary Engines.—Mr. R. J. Vincent.
- July /10—Lighthouses: Some Historical and Descriptive Notes.—Mr. Jas. Shirra.
- Aug. /10—Notes on the Equipment and Working of 20 Boilers in a Sugar Refinery.—Mr. James Kidd.
- Sept. /10—Gas Engines and the Determination of Their Commercial Efficiency.—Mr. G. A. Julius.
- Oct. /10—Trouble Due to the Aeration of Water in Pumps.—Mr. G. N. Tregartheu.
- Mar. 1911—President's Address.—(Mr. G. A. Julius.)
- Apr. /11—Filling and Running Refrigerating Machinery in Shipboard.—Mr. William Sinclair.
- May /11—The Deisel Engine and Its Application.—Mr. H. H. B. Deane.
- June /11—The Strength, Elasticity, and Other Properties of N.S.W. Hardwood Timbers.—Prof. W. H. Warren.
- July /11—Condensing Plant.—Mr. F. Saunders.
- Aug. /11—The Supply of Air for Blast Furnaces.—Mr. W. H. Grieve.
- Sept. /11—Boiler Explosions as Affected by Unsymmetrical Rivetted Joints. Part 1, Typical Lap. Joint Boiler Explosion.—Prof. S. H. Barraclough.

- Sept. /11—Boiler Explosions as Affected by Unsymmetrical Rivetted Joints. Part 2, An Experimental Investigation of the Strains on Unsymmetrical Rivetted Joints.—Prof. S. H. Barraclough.
- Oct. /11—Refuse Destructor.—Mr. T. L. Kenway.
- Mar. 1912—President's Address. — (Mr. G. A. Julius.)
- May /12—(a) Normal Horse Power of Engines.—Mr. Jas. Shirra.
(b) The R.A.C. Rating.—Mr. E. F. Boulton.
- June /12—The Spiling Staff and Its Uses.—Mr. Walter Reeks.
- July /12—Steam Condensers and Their Application in Sugar Factories.—Mr. D. F. J. Harricks.
- Sept. /12—The Overtime or High Superheated Steam Engine.—Mr. Geo. Duncan Moffat.
- Mar. 1913—President's Address. — (Mr. G. A. Julius.)
The Alignment of Machinery.—Mr. William Sinclair.
- May /13—Auto Electrolysis and Its Relation to the Corrosion of Iron and Steel.—Mr. James McNamara.
- June /13—The Commercial Use of Industrial Motors.—Mr. E. F. Boulton.
- July /13—Elastic Deformation of Welds and Welded Drums.—Prof. S. H. Barraclough and Mr. H. A. Rorke.
- Aug. /13—A Short Lecture on Wireless Telegraphy.—Mr. C. Bartholemew.

- Sept. /13—Reinforced Concrete Construction.—Mr. A. J. Hart.
- Oct. /13—Elevating and Conveying Machinery—Mr. B. W. Jones.
- June /13—Some Notes on Lubrication.—Mr. E. F. Campbell (Student Member).
- Mar. 1914—President's Address. — Mr. Walter Reeks.
- Apr. /14—Liquid Fuel.—Mr. J. G. McEwin.
- May /14—Mechanical and Electrical Clocks.—Mr. A. W. Tournay-Hinde.
- June /14—The Design and Construction of Long Span Bridges.—Mr. R. H. Fry.
- July /14—A Modern Pumping Plant.—Mr. F. Saunders.
- Aug. /14—An Investigation of the Turbulent Motion of Gases in an Ordinary 4 Cycle Gas Engine.—Mr. Herbert J. Swain, B.Sc. (Syd.), B.A. (Cantab), Late 1857 Science Research Scholar and Exhibitioner of Emmanuel College, Cambridge.
- Sept. /14—The Mechanically Geared Steam Turbine.—Mr. W. H. Grieve.
- Oct. /14—Notes and Comments on the Development of Marine Engineering in the Sydney and Hunter River Service.—Mr. D. Chalmers.
- Aug. /14—Design of Steel Workshop Buildings to Suit Colonial Conditions.—Mr. J. D. Dilling (Student).
- Mar. 1915—Military Field Engineering. — The President, Prof. S.H.E. Barraclough, M.E.

- Apr. /15—A Note on Marine Propulsion in 1914.—
Mr. D. F. J. Harricks.
- May /15—The Michell Thrust Bearing.—Mr. J. A.
Taylor.
- June /15—Consideration in the Design of Indus-
trial Machines.—Mr. R. Sykes.
- July /15—Building Construction under Modern
Acts.—Mr. A. J. Hart.
- Aug. /15—The Manufacture of Small Artillery
Shells.—Mr. D. F. J. Harricks and
Mr. R. Clayton.
- Sept. /15—Weights, Measures, and Balances.—Mr.
J. W. Bragg.
- Oct. /15—President's Address.—(Prof. S. H. E.
Barraclough.)
- May /15—Notes on the Use of Elastic and Vul-
canite Grinding Wheels.—Mr. J. W.
Lees (Student).
- Mar. 1916—Bulk Handling and Storage of Grain.—
Mr. William Poole.
- Apr. /16—Notes of Some Experiments on the Flow
of Air on Lead Blast Furnaces.—Mr.
A. W. Tournay-Hinde.
- May /16—Aerial Rope Transport.—Mr. J. W.
Mackie.
- June /16—The Brennan Third Rail Device for
Unifying the Railway Gauges of the
Commonwealth of Australia.—Mr.
Charles Wilkin.
- July /16—The Colonial Type Boiler—Land and
Marine.—Mr. Wm. Sinclair.
- Aug. /16—Lubrication.—Mr. J. G. McEwin.
- Sept. /16—The Commercial Manufacture of
Oxygen.—Mr. H. A. Bremner.
- Oct. /16—President's Address.—(Mr. J. W.
Bragg.)

- Mar. 1917—Some Notes and Observations Relative to Engineering in Great Britain During the War.—Mr. Russell Sinclair.
- Apr. /17—The Microscopy of Steel.—Mr. J. B. Smart.
- May /17—The Transmission of Power by Gearing.—Mr. Alfred Snashall.
- June /17—Notes on Estimating and Cost of Architectural and Engineering Works.—Mr. H. A. Mitchell.
- July /17—Concrete Ship Building.—Mr. J. G. McEwin.
- Sept. /17—(a) Notes on an Electrically Driven Hydraulic Pumping Plant.—Mr. Hector Kidd.
(b) Notes on Improving the Efficiency of Fuel Economisers.—Mr. Henry Shaw.
- Oct. /17—President's Address.—(Mr. D. F. J. Harricks.)
- Nov. /17—The Balancing of Rotating Masses, with Special Reference to Screw Propellers.—Mr. J. J. King-Salter.
- Mar. 1918—Permeability of Concrete by Water.—Mr. J. B. Smart and Mr. A. Morrison.
- Apr. /18—Some Notes of Experiments on the Transmission of Heat from Non-Luminous Flames through Thin Water Cooled Plates.—Mr. A. W. Tournay-Hinde.
- May /18—Cooling of Condensing Water by Towers and Spraying.—Mr. E. W. Marriott.
- June /18—Small Coastal Steamers.—Mr. William Sinclair.

- July /18—Bridge Construction in N.S.W.—Mr. W. F. Burrow.
- Aug. /18—Modern Road Pavements. — James Vicars, M.E.
- Sept. /18—A Method of Calibrating a Sharp-edged Orifice Used for Determining the Flow of Air.—Mr. Herbert J. Swain.
- Oct. /18—President's Address.—(Mr. D. F. J. Harricks.)
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- Nov. /19—The Organisation of the Transportation Services of the British Armies on the Western Front.—Lieut.-Colonel A. C. Fewtrell, D.S.O., A.E.