instruments of radio; a classic series on the reflection, transmission and absorption of materials; the determination of the ratio of the electrical and magnetic units of electricity which gives the velocity of light; aeronautic instruments; a summary of some 40 new developments and improvements made in the bureau laboratories; aircraft engine radiators; causes and remedies for failures of railway materials; fire resistance; structural materials researches; chromium plating researches making possible the new notable art of plating this hardest of all metals; photography through fog; luminous efficiency of the firefly—a remarkable classic determination of this interesting quantity as basic standard data for research on artificial light production; basic colorimetry; properties of metals and alloys; measuring the heat of the stars, and hundreds of other topics of fundamental interest to scientists and technicians and of great concern to industry.

The new journal will contain, it is expected, scientific and technical research papers comparable in interests and importance with those already issued.

It is believed that this union of pure and applied science in one journal will tend to shorten the lag between the discovery of some new material or process in the laboratory and its application in industry.

The subscription rate is \$2.75 in the United States, Canada, Mexico or Cuba, and \$3.50 per year for other countries. The price of single copies is 25 cents domestic and 31 cents foreign. Remittances must be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., not to the Bureau of Standards.

## THE GLASGOW MEETING OF THE BRITISH ASSOCIATION

As has already been noted here this year's meeting of the British Association for the Advancement of Science will be held in Glasgow, opening on September 5. From an article in the London *Times* the following is taken:

The president, Sir William Bragg, will give an address on "Craftsmanship and Science," reviewing in a wide, rather than technical, manner the relations between science and industry. Between 250 and 300 papers will be read, 26 being by women. The two evening discourses will be given by Professor E. A. Westermarck on "The Study of Popular Sayings," and by Professor F. G. Donnan, on "The Mystery of Life." Professor Donnan's address will be a study of the present position in biochemical research.

In the section dealing with mathematical and physical sciences, recent atmospheric researches in relation to flying will be dealt with by Mr. M. A. Giblett, of the Air Ministry, who will speak on "Wind Structure Research at the Royal Airship Works, Cardington." Discussions

will take place on the "Mechanism of Thunderstorms" and on the "Photographic Measurement of Radiation." A paper will also be read by Dr. R. A. Watson-Watt on the present knowledge of atmospherics in connection with wireless.

In Section B (chemistry), a series of discussions on current problems in chemistry—fermentation, light reactions and stereochemistry—will take place, followed by an exhibition of cinematograph films lent by Imperial Chemical Industries, Limited, Kodak, Limited, and Sir James Irvine. The Ardeer Factory of Nobel's Explosive Company and other factories will be visited.

In Sections D (zoology) and K (botany), there will be a discussion on a "Biological Investigation of British Fresh Waters." In Section F (economics), a discussion will be held, jointly with Section J (psychology), on the nature and present position of skill in industry; a discussion, jointly with Section M (agriculture), on the incidence of taxation in agriculture; and papers will be read on rationalization in industry.

In Section G (engineering), the presidential address, by Sir William Ellis, will be on the 'Influence of Engineering on Civilization.' A discussion, jointly with Section L (education), on school, university and practical training in the education of the engineer, will take place.

In Section H (anthropology), Sir Richard Paget will speak on "Evidence of the Nature and Origin of Human Speech" and Sir W. Flinders Petrie on his recent excavations in Southern Judea.

In Section K (botany), a special department of forestry will hold sessions throughout the meeting. Sir John Stirling Maxwell will give a lecture on "Forestry in Scotland, Past, Present and Future." The president of the section will be Professor Dame Helen Gwynne-Vaughan.

In Section L (education), the president will be Dr. Cyril Norwood, headmaster of Harrow. His address will be on "The Next Step in Education." There will be a discussion on "Broadcasting in Education," in cooperation with the B.B.C., opened by Sir John Reith. Sir William Bragg, Sir Oliver Lodge and others are expected to take part in this discussion, which will be followed by a demonstration in a model studio.

Receptions by the Lord Provost and the Corporation will be held in the City Hall, and by the local committee in the Kelvingrove Art Galleries. Entertainments by public bodies, the Chamber of Commerce, Corporation of Paisley, Royal Faculty of Physicians and Surgeons, Platform of the Trades House, Royal Technical College, Institution of Engineers and Shipbuilders, Glasgow and West of Scotland College of Domestic Science, Clyde Navigation Trustees (in connection with their annual inspection of the port and harbor of Glasgow) are also included on the program, in addition to a special service on Sunday, September 9, in the Cathedral of St. Mungo.

## SCIENTIFIC NOTES AND NEWS

Dr. T. H. Morgan, of the California Institute of Technology, has been elected a foreign corresponding