energy supply of the world (fuel, solar energy, etc.), while a third suggestion dealt with the difficult and complicated question of international patents. The risk of overlapping efforts and the possible fear of interference with the special work of the unions is avoided by the provision—now coming into force—that the executive committee of the Research Council, which hitherto consisted of five members, should be enlarged, each union nominating an additional member.

At the concluding meeting the five members of the executive committee appointed by the general assembly were elected as follows: M. E. Picard (president), Mr. G. Lecointe and Professor Vito Volterra (vice-presidents), Dr. G. E. Hale, and Sir Arthur Schuster (general secretary).

THE ASSOCIATION OF IRON AND STEEL ELECTRICAL ENGINEERS

THE sixteenth annual convention will meet September 11 to 15 at Cleveland, Ohio, at which time there will be presented and discussed subjects dealing particularly with steel mill problems.

The papers have been written with a view of giving to the engineers as much practical data as is possible, feeling that this class of information is far more beneficial than the theoretical side when dealing with steel mill problems.

Some of those who will present and discuss the subjects are Dr. C. P. Steinmetz, Messrs. B. G. Lamme, Wilfred Sykes, A. G. Witting, F. C. Watson, D. M. Petty, L. W. Heller, R. B. Gerhardt, D. B. Rushmore, J. B. Crane, E. R. Fish, H. M. Rush, R. M. Butler, F. Hodson, Professor Edgar Kidwell, F. W. Cramer, A. R. Leavitt, E. T. Moore, R. H. Bauer, F. A. Wiley, L. F. Galbraith and R. S. Shoemaker.

A tentative list of the subjects to be presented are:

Improvement in Efficiency of Electric Power Supply.

A Review of Steel Mill Electrification.

Boiler Practices of 1922.

Education and Safety.

The Gas Engine as a Prime Mover for Power Generation.

Steam Turbines.

Judging Combustion from Gas Analysis.

Electrification of the International Nickel Company's Works for Monel Metal.

Some Considerations in the Electrification of the Steel Plant Railroad Yard.

Power in the Iron and Steel Industry.

Control-Motor-Lighting and Crane Standardization.

Electric Furnaces.

Electrical Developments in 1922.

Investigation of Insulators for Steel Mill Service.

In addition to the technical sessions, there will be an exhibition of apparatus of particular interest to the steel mill engineers. This exhibit will cover approximately 30,000 square feet of floor space and will be held in the same hall as is the technical sessions.

Representatives from practically every steel mill in the United States are expected at this convention for it is planned to interest practically every class of engineer, such as general managers, general superintendents, department superintendents, chief engineers, steam engineers, electrical engineers, electrical superintendents, mechanical engineers, master mechanics, superintendents of power, engineers of tests, safety engineers and department foremen.

THE AMERICAN ELECTROCHEMICAL SOCIETY

THE meeting will be opened by President Schluelerberg at Montreal on Thursday, September 21, and the technical program will proceed with the presentation and discussion of papers on electrolysis and electroplating. The recently organized Division on Electrodeposition (G. B. Hogaboom, *chairman*; Wm. Blum, *secretary*) will be well represented and take active part in the discussion of these papers.

One of the papers of the Thursday morning session will deal with the physical properties of electrolytic iron—a product which is being turned out commercially, contrary to all predictions of ten years ago. There will also be papers on zinc, brass and other electrodeposited metals.

On Thursday afternoon and Friday morning a symposium on "Industrial Heating" will be in progress. The Electrothermic Division