#### INSTITUTE AND RELATED ACTIVITIES

Journal A. I. E. E.

# STANDARDIZATION OF INSULATED WIRES AND CABLES

A conference on the standardization of insulated wires and cables was held in New York, February 2d. The conference which was called by the American Engineering Standards Committee at the instance of the American Railway Engineering Association, was attended by representatives of fourteen national organizations.

After a thorough discussion of the many considerations involved, it was unanimously decided that, "The unification of specifications for wires and cables for other than telephone and telegraph use should be undertaken under one general plan, covering substantially all the more important uses." It was agreed that work on the following should be included:

Conductor, quality, stranding, sizes.

Rubber insulation.

Varnished cloth insulation.

Impregnated paper insulation.

Magnet wire (including enamel, cotton and silk insulation).

Fibrous coverings (including asbestos).

Sheaths.

Armor.

Standard make-ups.

Nearly a dozen organizations now have important publications on the subject, and it was agreed that the proposed work should be a unification of the specifications and standards already in existence, rather than an attempt to formulate entirely new standards, except in fields not already covered.

It was the consensus of opinion that, in order to promote export trade, it would be desirable to have all the American wire and cable standards assembled in a single book. This form of publication, while giving due credit to the participating organizations, would appear to foreign wire and cable purchasers as a complete book of American Standards, rather than as the standards of societies comparatively unkown abroad. This has been done in a very thorough way by the Germans and to a considerable extent by the British, thus placing Americans at a decided disadvantage in foreign trade. It was agreed that if such a book were prepared and given proper publicity in foreign countries, it would remove one of the greatest difficulties under which American manufacturers are now laboring in developing export trade.

The proposed work will be carried out under the auspices and rules of procedure of the American Engineering Standards Committee.

#### **RECENT FOREIGN ENGINEERING STANDARDS**

Copies of the following engineering standards, issued in 1920 by foreign national standardizing bodies, are on file with the American Engineering Standards Committee.

British Engineering Standards Association

- No. 1 Rolled Steel Section for Structural Purposes, Lists of
- No. 12 Portland Cement, Specifications for
- No. 94 Watertight Glands for Electric Cables, Specification for No. 97 Watertight Fittings for Incandescent Electric Lamps, Specifications for
- No. 100 Body Spaces and Frame Ends for Chassis for Private Automobiles, Dimensions for
- No. 106 Electrically Heated Cooking Range, Specification for
- No. 122 Milling Cutters and Reamers, Standards for
- No. 131 Notched Bar Test Pieces, Forms of
- Canadian Engineering Standards Association
- No. 1 Steel Railway Bridges, Standard Specification for
- Association Belge de Standardisation (Belgium)
  - No. 1 Construction of Metal Framework, Rules for
  - No. 2 Construction of Metal Tanks, Rules for No. 3 Construction of Coverings and Partitions of Corrugated
  - No. 3 Construction of Coverings and Partitions of Corrugated Galvanized Sheet-iron, Rules for
  - No. 4 Shafts and Transmission Pulleys, Standardization of
  - No. 5 Construction of Metal Bridges, Rules for
- Hoofdcommissie voor de Normalisatie in Nederland (Holland) N 19 Compression Couplings
  - N 20 Flange Couplings
  - N 29 Loose Collars for General Construction

N 30 Loose Collars for Millgearing

- Normenausschuss der Deutschen Industrie (Germany) DIN 187 Angle Arm for fixed Bearings for Transmission Shafting DIN 475 Widths of Spanner Jaws
- Commission de Normalisation du VSM (Switzerland)
  - VSM 10300 Technical Drawings—Oblique Script; Size of Letters; to Graphic Presentation of Screw; Cross-Sections
    - VSM 10307 VSM 12050 Screw-Whitworth Threads: General Data
    - VSM 12050 Screw-wintworth Threads. General Data VSM 33900
      - to "Sulzer" Attachment for Milling Cutters
- VSM 33914
- Sveriges Maskinindustriförening (Sweden)
  - SMS 1 Size for Standard Sheet
  - SMS 2 Metric Screw Thread System SMS 3 Whitworth Screw Thread System
  - SMS 5 Wintworth Serew Thread System SMS 5 Hexagonal Nuts-Type B6M-BSW Screw Thread System
  - SMS 7 Finished Hexagonal Screws-Type B6S-BSW Screw Thread
  - System
  - SMS 8 Series of Standard Diameters

Photostatic copies of these standards can be furnished at a nominal cost, or the copies on file may be consulted at the offices of the American Engineering Standards Committee.

# INSTITUTE OF RADIO ENGINEERS OFFICERS AND BOARD OF DIRECTORS FOR YEAR 1921

The annual election of officers recently held by the Institute of Radio Engineers resulted in the election of E. F. W. Alexanderson, president; Fulton Cutting, vice-president; A. N. Goldsmith, secretary, and W. F. Hubley, treasurer. The Board of Direction of the Institute is made up of the officers and the following managers: E. H. Armstrong, W. H. G. Bullard, E. H. Colpitts, L. Espenscheid, J. V. L. Hogan, L. R. Krumm, R. H. Marriott, Donald McNicol and George O. Squier.

# NATIONAL RESEARCH COUNCIL AN INFORMATIONAL SERVICE CONCERNED WITH METALS AND ALLOYS

An Alloys Research Association is being formed with an Alloys Informational Service as the first step. This is to be cooperative on the part of those interested in metals and their alloys. An Advisory Committee, composed of 17 prominent technical men, was formed sometime ago and this committee has evolved a plan, in conference with the Institute of Metals Division of the American Institute of Mining and Metallurgical Engineers, whereby a service of a different scope from any now existing can be carried on for the benefit of the alloy men. It has been felt that it is time to broaden the sources of knowledge and to have a cooperative service that will critically and analytically digest the great mass of data that has been accumulated, but is now largely inaccessible. Technical men have not the time to spend in searching even all of the current literature. It is now planned to create a special scientific staff composed of a director and a corps of assistants who will give all their time to rendering a service of two distinct types-(1)Current Informational Service-supplying information as to new results; (2) Reference Service-supplying as fully and promptly as practicable all existing information relating to any phase of a subject. The Board of Managers, appointed by three of the divisions of the National Research Council, is constituted of Mr. Alfred D. Flinn, Secretary of Engineering Foundation, Dr. R. B. Moore of the Bureau of Mines, and Mr. W. M. Corse, Secretary of the Institute of Metals Division of the American Institute of Mining and Metallurgical Engineers.

The Research Extension Division of the National Research Council, Washington, D. C., which is aiding in the organization, will be glad to supply fuller details about this service.

### **MEETING OF DIVISION OF ENGINEERING**

Some benefits to industry resulting from research scientifically conducted were interestingly stated by Dr. Charles L. Reese, Chemical Director, E. I. Du Pont de Nemours & Company, and Mr. A. J. Wedhams, General Superintendent, International Nickel Company, in addresses before the Division of Engineering of the National Research Council, February 4, at the Engineers Club, New York.

Dr. Reese emphasized the value to industries of organized research in particular. Some research projects are not immediately productive of financially profitable returns, others yield great savings or large profits immediately. If research be properly organized, or conducted on a cooperative basis by one great industry or a group of industries, a winning average. from the accountant's method of keeping score, is much more likely to be made. But organization and cooperation must be so conducted that the individual research worker feels no restraint. Mr. Wadhams told of the hurdles research had to take successfully in order to become established in old industrial plants. Three groups particularly required "converting," the directors, the shop superintendents and the foremen. Success depends largely upon the human qualities of the research personnel and their ability sincerely to recognize the value of the knowledge gained by the practical man in his experience, as well as the knowledge of the laboratory.

Galen H. Clevenger, Consulting Metallurgist, U. S. Smelting and Refining Company, Boston, presided at the meeting of the Division of Engineering, at which there were present twentytwo members and guests, men of high standing as research specialists or executives in leading industries. The Division's work is directed toward stimulation of research in the industries, and bringing about cooperation in the acquisition of new scientific knowledge and its dissemination among engineers and managers of our industries. The Division is supported by the National Research Council and by Engineering Foundation, representing the National Societies of Civil, Mining, Metallurgical, Mechanical and Electrical engineers.

# PERSONAL MENTION

RALPH D. MERSHON, consulting electrical and mechanical engineer, announces that his New York office is removed to 143 Liberty Street.

ALLEN E. RANSOM, formerly with the Westinghouse Electric & Mfg. Co., has become Superintendent of the Olympia Light & Power Co., Olympia, Wash.

H. B. BASSETT has been placed in charge of a Chicago office of the Acme Wire Company, opened at Room 1105, Monadnock Block, 53 West Jackson Boulevard, Chicago.

H. R. SEARING, who was located with the Aviation General Supply Depot, Fairfield, Ohio, is now connected with the United Elec. Lt. & Pr. Co., 130 East 15th St., New York.

GEORGE E. SANFORD has been elected president of the American Society of Safety Engineers. Mr. Sanford is with the General Electric Company, West Lynn, Mass.

FREDERICK T. LOHR, who has been with the New York Pyrites Co., Inc., at Gouverneur, N. Y., is now electrical engineer with the Soper-Mitchell Coal Co., Morgantown, West Va.

W. J. DAVIS of the General Electric Co., who has been Pacific Coast engineer at San Francisco, is now located in the Ry. and Traction Engineering Department at Schenectady, N. Y.

FRANK CONRAD of the Westinghouse Electric and Manufacturing Company, has been appointed assistant chief engineer. He has been located with that company for nearly thirty years. FRED G. SINGER has accepted a position as instructor in Electrical Engineering at the University of Wisconsin. Mr. Singer has been a student engineer with the General Electric Company.

J. B. PRICE has discontinued his connection as New York District Manager of the Refinite Co., Inc., and will be associated from now on with the American Water Softener Co. of Philadephia.

CARROLL H. SHAW is now in the Engineering Distribution & Installation Department of the New York Edison Company. He has been located for the past year with Jackson & Moreland, Engineers, Boston.

WILLIAM A. WEBER, formerly with the Century Electric Co., Philadelphia, has become connected with the Western Electric Co., Chicago, where he will be in the central office engineering division, Hawthorne Plant.

A. H. GRISWOLD, who has been located in San Francisco with the Pacific Telephone & Telegraph Company, has been appointed assistant chief engineer of the International Western Electric Company, Inc., in New York.

HARRY W. OSGOOD of the Bethlehem Shipbuilding Corporation, has been appointed plant engineer of the Fore River works, at Quincy, Mass. He has been with the Bethlehem company since the fall of 1919.

JOSEPH H. LIBBEY, formerly electrical engineer with the Eastern Massachusetts Street Railway Company, has joined the organization of H. M. Haven & Wm. W. Crosby, engineers and architects, with offices at 40 Court Street, Boston.

W. R. WHITNEY, director of the research laboratory, General Electric Company, Schenectady, N. Y., was awarded the Perkin medal on January 14 by the American Section of the Society of Chemical Industry. Dr. Whitney received this honor for his many inventions in chemistry.

WILLIAM EVES, 3rd, whose former address was with the American Vulcanized Fibre Co., Wilmington, Del., is at present working in Germany under the American Food Administration, with the American Friends Service Committee. He expects to return to the U. S. this summer.

CHARLES F. VAN WICKLE has completed his work in designing electrical machinery with the Silk Producers Corporation, Hackensack, N. J., where he has been since April, 1920, and will return to his old work, telegraph engineering. His present address is 573 West 191st St., New York City.

H. C. DEFFENBAUGH has resumed his work as engineer and assistant to the secretary with the Empire State Gas and Electric Association. He was away last year on work in connection with a survey of the water-power possibilities of New York State under the direction of Col. William Barclay Parsons.

ALBERT U. BRANDT, formerly superintendent in the Alameda County District, Pacific Gas & Electric Company, has become electrical engineer of the San Francisco division of that company, and will have charge of the operation and maintenance of the electrical properties and steam generating stations in San Francisco.

J. P. JOLLYMAN of the Pacific Gas & Electric Company, has been promoted to the position of chief of the division of hydroelectric and transmission engineering, in charge of all the engineering work relating to hydroelectric stations, substations