

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS

NORTH EASTERN DISTRICT MEETING

& STUDENT BRANCH CONVENTION



SPRINGFIELD, MASSACHUSETTS

MAY 3-5, 1939



Springfield Across the Connecticut

Headquarters: Hotel Kimball

MEETING FEATURES

Springfield, Mass., provides a picturesque setting for the A.I.E.E. North Eastern District Meeting to be held May 3-5, 1939, with headquarters in the Hotel Kimball. Springfield is located on U. S. route 20 running east and west and U. S. route 5 running north and south, thus providing convenient facilities for those traveling by automobile. Adequate parking facilities, either indoor or outdoor, may be obtained near the Meeting headquarters. Good transportation facilities also are available from all points to Springfield by either bus or railroad. The program for the meeting provides attractive entertainment, interesting trips and technical sessions.

Stag Smoker

A stag smoker will be held at 8:00 p.m. Wednesday evening, May 3, at the Highland Hotel, and a good time is in store for all. An interesting speaker has been secured for this event and in addition, some other entertaining features are promised. A buffet lunch will be served at the conclusion of the entertainment. Tickets for the smoker, \$1.25.

Mixed Banquet

On Thursday evening, May 4, at 6:30 p.m. an informal banquet will be held at the Hotel Kimball, for members and their guests. There will be short addresses by some of the National and District officers. The noted Dr. John L. Davis will be the principal speaker, and Professor W. H. Timbie of Massachusetts Institute of Technology will be toastmaster. Tickets for the banquet, \$2.25 each.

Ladies' Entertainment

Entertainment for the ladies will be in the form of a drive to several of the nearby colleges, visits to museums of historical interest, a trip to Northampton with luncheon at Wiggins Old Tavern, and a bridge party.

The women of the Springfield Section will provide transportation for the visiting women. Complete details of entertainment will be available at the registration desk.

Inspection Trips

The East Springfield Works of the Westinghouse Electric & Manufacturing Company, the United States Armory, and many varied industries in and about Springfield afford excellent opportunity for interesting and instructive insight into these industries. Tickets for the trips can be obtained at the registration desk and will be 25 cents for each trip; transportation will be provided for those desiring it at no additional expense. The following schedule has been arranged for these trips:

Wednesday Afternoon, May 3

1. **Bigelow Sanford Carpet Company, Thompsonville, Conn.** This plant, which is almost a hundred years old, manufactures a full line of rugs and carpets, and is one of the largest plants of this kind in the country.
2. **Stevens Paper Company, Westfield, Mass.** The plant which will be visited manufactures a high grade kraft paper of extreme thinness, which is used principally as a solid dielectric in the manufacture of capacitors.

Thursday Afternoon, May 4

1. **Chapman Valve Manufacturing Co., Indian Orchard, Mass.** This company has two electrical furnaces which are used in casting special alloy steels, used in their valves. The furnaces will be in operation during the trip.
2. **Package Machinery Company, Springfield, Mass.** This company manufactures a varied line of packing and wrapping machines.
3. **United States Armory, Springfield, Mass.** The chief product made here has been the Springfield rifle, and they are now engaged in production of the new semi-automatic rifle. In addition there is a large museum containing both early and modern weapons of all kinds.

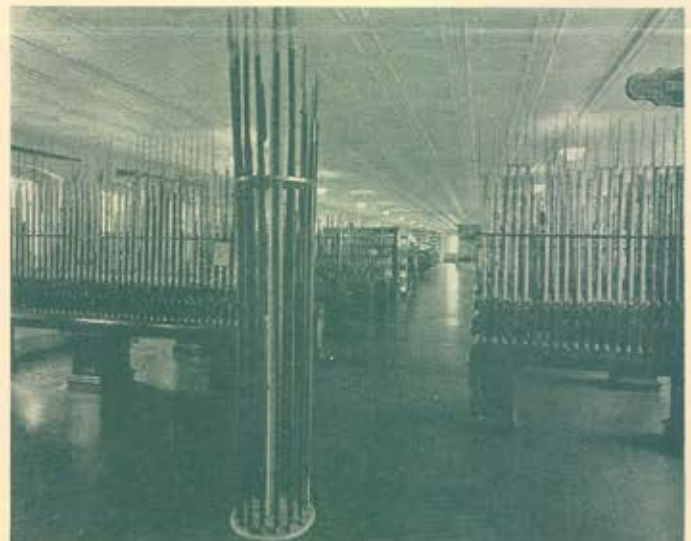
Friday Morning, May 5

1. **Westinghouse Electric & Manufacturing Co., East Springfield, Mass.** This plant manufactures a complete line of domestic and commercial refrigerators, air conditioning equipment, and small appliance motors for fans, vacuum cleaners, etc.

Friday Afternoon, May 5

1. **Fisk Rubber Company, Chicopee, Mass.** This plant, which manufactures chiefly tires, also makes tape, belts, and other rubber products.
2. **Pratt and Whitney Aircraft Corp., Hartford, Conn.** The various divisions of this corporation manufacture aircraft engines, propellers, and airplanes.

This will be an unusual opportunity for members to visit both the United States Armory and Pratt and Whitney Aircraft Corp., but those desiring to attend either of these trips must signify their intention by Wednesday noon and be prepared to submit proof of citizenship by birth certificate or other acceptable means. In lieu of a birth certificate, a certificate from the town clerk where you reside, stating that you are a registered voter, an army or navy discharge certificate, a pilot's license, or a passport will be acceptable as proof of citizenship. Ladies will not be admitted to the U. S. Armory or Pratt and Whitney Aircraft Corp., but they may visit the Armory Museum if a sufficient number are interested.



A scene at the Springfield Armory Museum, to be visited during the Meeting.

PROGRAM

DAYLIGHT SAVING TIME

ADVANCE COPIES OF PAPERS

For the convenience of those who wish to obtain preprints in advance of the meeting, an order form is enclosed. If ordered by mail, price 10c per copy; if purchased at Institute headquarters or at the meeting, price 5c per copy. Coupon books in \$1.00 and \$5.00 denominations are available for those who wish to avoid remittance by check or otherwise. Papers not mentioned by number on the order blank will not be available in advance copy form. Most of the papers ultimately will be published in **ELECTRICAL ENGINEERING** or the **TRANSACTIONS**.

Wednesday, May 3

9:00 a.m.—Registration

10:00 a.m.—Industrial Power Applications

J. D. Wright, Presiding

- 39-102. Turbine-Electric Textile Range Drives, E. L. Richardson, General Electric Company
- 39-103. Characteristics and Power Requirements of Spinning Frames, E. A. Untersee, General Electric Company
- 39-104. Electrical Equipment on Machine Tools, B. P. Graves, Brown & Sharpe Mfg. Co.

2:00 p.m.—Power Generation

Edward C. M. Stahl, Presiding

- 39-105. The Hydrogen-Cooled Turbine Generator, D. S. Snell, General Electric Company
- 39-97. Hydrogen-Cooled Turbine Generators, M. D. Ross and C. C. Sterrett, Westinghouse Electric and Mfg. Co.
- 39-106. Some Factors in the Mechanical Design of High Speed Turbo-Generators, S. H. Mortensen and J. J. Ryan, Allis-Chalmers Mfg. Co.
- 39-107. Special Problems of Two-Pole Turbine Generators, C. M. Laffoon and B. A. Rose, Westinghouse Elec. & Mfg. Co.

8:00 p.m.—Stag Smoker

(Highland Hotel)

Thursday, May 4

10:00 a.m.—General Session

J. P. McKearin, Presiding

Address: John C. Parker, President American Institute of Electrical Engineers, and Vice-President, The Consolidated Edison Company of New York, Inc.

Address: C. W. Kellogg, President, Edison Electric Institute, and Chairman of Board, Engineers Public Service Co.

Period of questions

Presentation ceremony of the Faraday Medal of the Institution of Electrical Engineers, awarded to Dr. W. D. Coolidge.

2:00 p.m.—Power Transmission

K. B. McEachron, Presiding

- 39-93. Carrier Current Losses Measured and Interference Minimized on Boulder-Los Angeles Transmission Line, J. D. Laughlin, Bureau of Power and Light, City of Los Angeles, and W. E. Pakala and M. E. Reagan, Westinghouse Elec. & Mfg. Co.
- 39-99. Dielectric Strength of Porcelain, P. L. Bellaschi and M. L. Manning, Westinghouse Elec. & Mfg. Co.
- 39-108. Corona Discharge on Rubber Insulated Cables, E. B. Paine and H. A. Brown, University of Illinois.
- 39-109. Characteristics of Restricted Ionization and Its Relation to Voids in Insulating Materials, C. L. Dawes, Harvard University and P. H. Humphries, Tulane University
- 39-100. Equivalent Circuit Impedance of Regulating Transformers, J. E. Clem, General Electric Company
- 39-98. Regulating Transformers in Power System Analysis, J. E. Hobson, Westinghouse Elec. & Mfg. Co. and W. A. Lewis, Cornell University

6:30 p.m.—Mixed Banquet

Friday, May 5

9:00 a.m.—Student Sessions

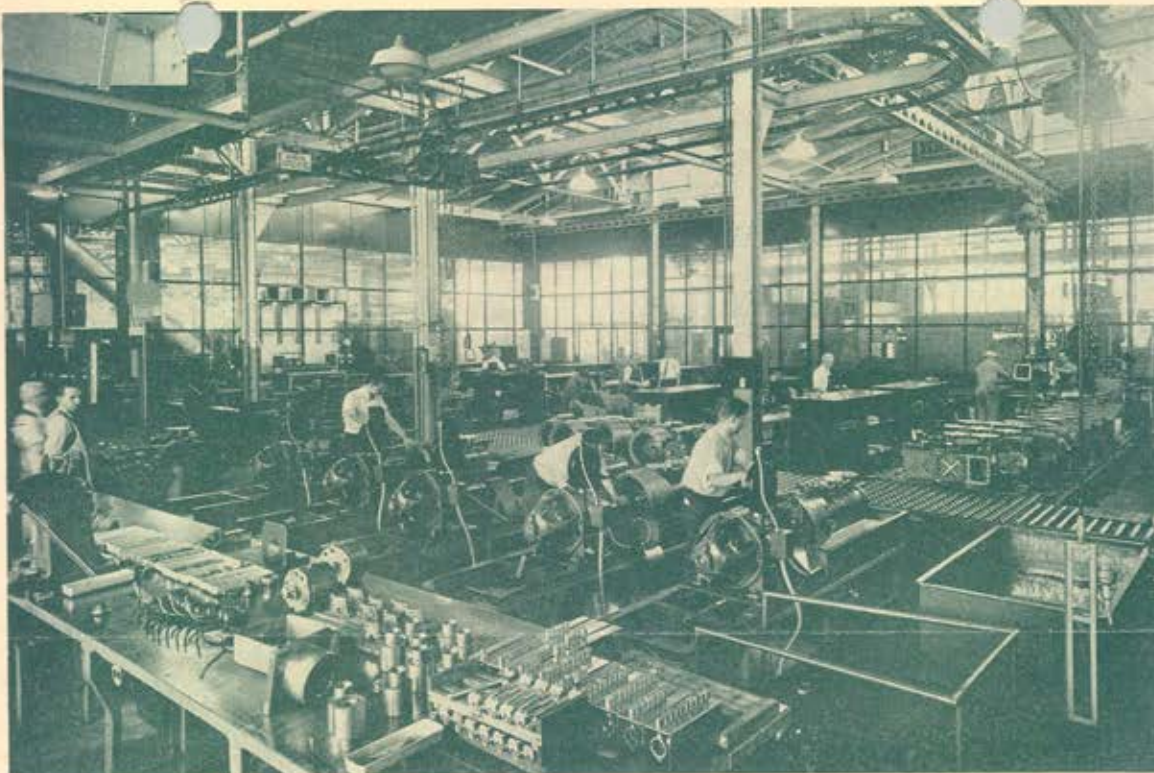
Prof. E. M. Strong is arranging for two parallel Student Sessions, with student members presiding.

There will be a luncheon meeting for the Student Branch Counsellors and Chairman at the Highland Hotel immediately following this meeting.

2:00 p.m.—Selected Subjects

Charles F. Scott, Presiding

- 39-95. Recent Developments in Speed Regulation, C. R. Hanna, K. A. Oplinger, and S. J. Mikina, Westinghouse Elec. & Mfg. Co.
- 39-110. Modern Trends of Low Voltage Air Circuit Breakers, J. W. Seaman, General Electric Company
- 39-94. Radio As an Emergency Means of Bridging Gaps in Wire Telephone Lines, J. G. Patterson, New England Tel. & Tel. Co.
- 39-96. Two-Phase Coordinates of a Three-Phase Circuit, E. W. Kimbark, Polytechnic Institute of Brooklyn
- 39-101. The Rectifier Calculus, W. M. Goodhue, Harvard University
- 39-92. A New Measuring Instrument for Direct Current, H. T. Faus and A. J. Corson, General Electric Company



Air Conditioning Compressor Assembly and Test Room at East Springfield Plant of Westinghouse Elec. & Mfg. Co., to be visited during the Meeting.

Faraday Medal Presentation

Presentation of the Faraday Medal for 1938, awarded by the Institution of Electrical Engineers (Great Britain), will be made Thursday morning at the general session to Dr. W. D. Coolidge, Director of the Research Laboratory, General Electric Company. This medal is awarded each year for notable scientific and industrial achievement in electrical engineering or for conspicuous service rendered to the advancement of electrical science.

General Information

Hotels and Registration

Following is given a list of principal hotels in the city, together with daily rates, European plan. Students can secure rooms, if they desire, at the Y.M.C.A., which is adjacent to the meeting headquarters at \$1.00 for one night or \$1.50 for two nights. Members should make their hotel reservations directly with the management of the hotel.

Advance registration will greatly assist the committees making arrangements and will avoid congestion on arrival. For this purpose an advance registration card will be sent to members in the District and nearby territory. A registration fee of \$2.00 will be charged all nonmembers, except Enrolled Students and the immediate families of members.

Hotel Rates

| | HOTEL KIMBALL | HIGHLAND HOTEL | HOTEL CHARLES | BRIDGWAY HOTEL |
|---------------------------|------------------|--------------------------|--------------------|-------------------|
| Single—hot and cold water | \$2.00, 2.50 | \$1.50, 2.00 | \$1.50, 2.00 | \$1.50, 1.75 |
| Double—hot and cold water | 4.00 | 2.50, 3.00 | 2.50, 3.00 | 2.50, 3.00 |
| Single—with shower | | | | 2.00 |
| Double—with shower | | | | 3.00 |
| Single—with bath | 3.00 | 2.00, 2.50 3.00 | 2.50, 3.00 | 2.50, 3.00 |
| Double—with bath | 5.00 | 3.50, 4.00 4.50, 5.00 | 3.50, 4.00 4.50 | 3.50, 4.00 |

Sports

No definite program of sports is being planned, but if any members desire, arrangements may be made at the registration desk for golf or tennis.

COMMITTEES

District Meeting: W. O. Henschke, Chairman; C. L. Dawes, vice-president, A.I.E.E. North Eastern District; R. G. Lorraine, secretary-treasurer; E. M. Strong, chairman, committee on student activities; F. A. Farron, L. Wetherill, R. J. Underwood, C. E. Kilbourne, H. D. Griffith.

Technical Program: F. R. Longley, chairman; L. C. Packer, J. W. Bennett, A. L. Davis, O. A. Browne, C. D. Brainard, F. Rogers, O. L. Riggs.

Student Sessions: E. M. Strong, chairman; E. A. Walker, A. G. Conrad.

Transportation and Trips: R. E. Curtis, chairman; J. N. Alberti, J. W. Bennett, J. M. Newton, A. Blair, D. L. Ross, J. Carson, L. C. Packer.

Entertainment: B. W. Durfee, chairman; J. J. Finn, A. Blair, J. N. Alberti, J. M. Newton.

Ladies' Entertainment: Mrs. J. J. Finn, Mrs. L. P. Kongsted, Mrs. W. O. Henschke, Mrs. H. D. Griffith, Mrs. R. E. Curtis, Mrs. F. R. Longley, Mrs. F. E. Haskell.

Hotels and Registration: H. Passburg, chairman; J. N. Alberti.

Publicity: W. S. Scheering, chairman; R. R. Menard, Q. A. Brackett.

Finance: F. E. Haskell.

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