

**AMERICAN INSTITUTE of
ELECTRICAL ENGINEERS**

1884

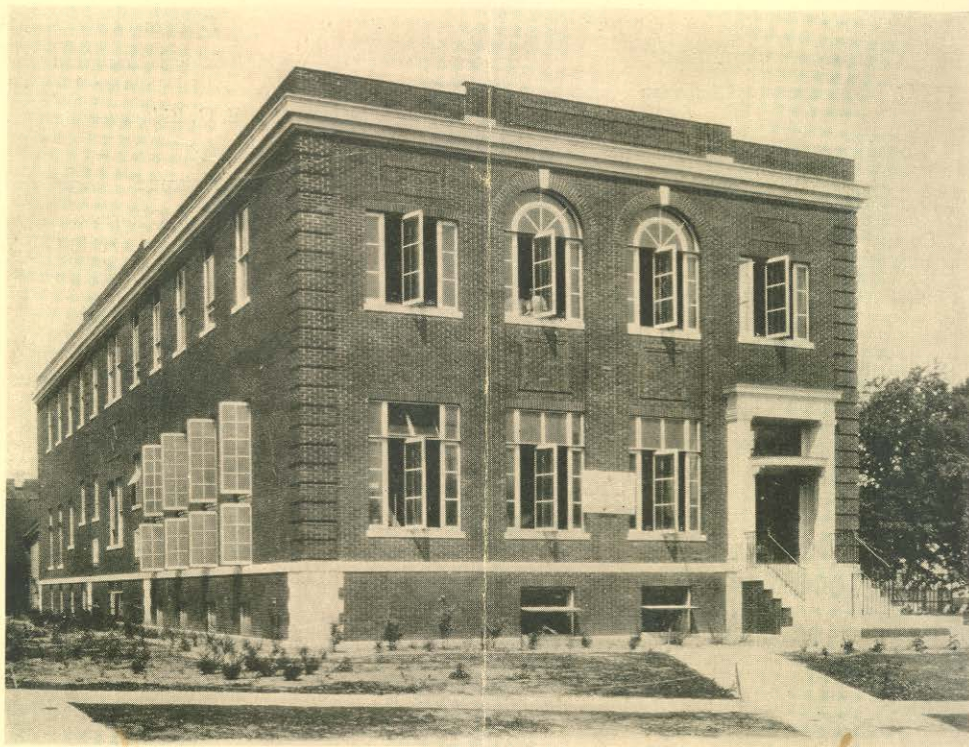
1931



North Eastern District Meeting

**SAGAMORE HOTEL
ROCHESTER, N. Y.**

April 29—May 2



Monroe Exchange of the Rochester Telephone Corp.

Committees

District Meeting Committee

I. E. Moulthrop, *Chairman*
Vice-President, North Eastern District
A. C. Stevens, *Secretary-Treasurer*,
North Eastern District

J. N. Alberti	C. H. Kline
C. W. Henderson	H. J. Klumb
E. C. Karker	R. G. Warner

F. C. Young

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F. C. Young, *Secretary-Treasurer*
H. S. Collins, *Assistant Secretary-Treasurer*

Counselors Committee

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Local Executive Committee

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J. G. Carritt W. H. Reichard
H. E. Gordon H. C. Ward
F. C. Young

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Sydney Alling C. F. Estwick
J. R. Clark E. K. Huntington
C. C. Eckhart Mrs. F. C. Young

Publicity

O. L. Angevine, *Chairman*

Inspection Trips and Transportation

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O. L. Angevine R. E. Kruger
O. W. Bodler H. F. Kurtz, Jr.
E. H. Branson H. E. Lawrence
E. S. Bundy Lee McCanne
H. E. Gordon F. McVittie
I. E. Powell

Entertainment and Banquet

John G. Carritt, *Chairman*
Leigh Gillespie E. A. Hanover

Sports

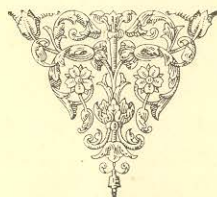
W. H. Reichard, *Chairman*
O. W. Bodler W. J. Consler
E. G. Eidam

Finance

H. J. Klumb, *Chairman*
Wesley Angle H. E. Gordon

Ladies' Committee

Mrs. O. L. Angevine, *Chairman*
Mrs. V. M. Palmer, *Vice-Chairman*
Miss H. A. Smith, *Treasurer*
Mrs. F. C. Young, *Registration*
Mrs. O. W. Bodler Mrs. H. J. Klumb
Mrs. J. G. Carritt Mrs. R. H. Manson
Mrs. H. E. Gordon Mrs. W. H. Reichard
Mrs. V. M. Graham Mrs. A. L. Schoen
Mrs. E. C. Karker Mrs. H. H. Sullivan



North Eastern District Meeting

Rochester, N.Y., April 29—May 2, 1931



THE seventh meeting of the North Eastern District will be held at Rochester, N. Y., April 29-May 2, with headquarters at the Sagamore Hotel. The Local Committee has arranged an attractive program consisting of four technical sessions, entertainment, interesting inspection trips, and a special program for the ladies.

Rochester because of its geographical location possesses scenic beauty of unusual interest and it is readily accessible from all points in the east. The city is particularly noted for its fine residential sections and it is known throughout the Empire State as the "City of Homes." It is also an important manufacturing center and several of the large plants which are located in the city will be open for inspection to members and their guests.

Technical Sessions

The first two technical sessions are on selected subjects, the third will present a symposium on noise, and the fourth session is a symposium on lightning. The selected subjects offer a variety of papers, some on cables, others on special transformers, cusps in the speed-torque curves of induction motors and equivalent circuits of imperfect condensers.

Entertainment

An informal reception with dancing and card playing will be held on Wednesday evening. The following evening will be devoted to an inspection of the Eastman Theater and Eastman School of Music. The Theater is reputed to be one of the most beautiful theaters in the country, and the School of Music, in the short

time it has been operating, has achieved international distinction. At the theater a performance of current attraction will be shown.

The Meeting Dinner

The Meeting Dinner will be held on Friday evening. H. H. Sullivan, Past President of the Rochester Engineering Society, will act as toastmaster. The speaker of the evening will be Professor Walter King Stone of the College of Architecture, Cornell University, whose subject will be "What the Artist May Contribute." Entertainment and dancing will follow the presentation of District Prizes.

Ladies' Entertainment

In addition to the foregoing entertainment features of the Meeting the Ladies' Committee has arranged a special program for the visiting ladies which consists of luncheons, a luncheon and bridge at the home of Mrs. H. H. Sullivan and sightseeing trips to some of Rochester's scenic points of interest.

LADIES' PROGRAM

Wednesday, April 29

- 9:00 a.m. Registration at Meeting Headquarters
- 12:30 p.m. Luncheon at Sagamore Hotel
- 2:00 p.m. Sightseeing Trip
- 8:00 p.m. Reception at Sagamore Hotel

Thursday, April 30

- Morning free for shopping
- 1:00 p.m. Luncheon and Bridge at the Home of Mrs. H. H. Sullivan, 1050 East Avenue
- 7:30 p.m. Inspection of Eastman Theater and Eastman School of Music, Including a Performance of Current Attraction

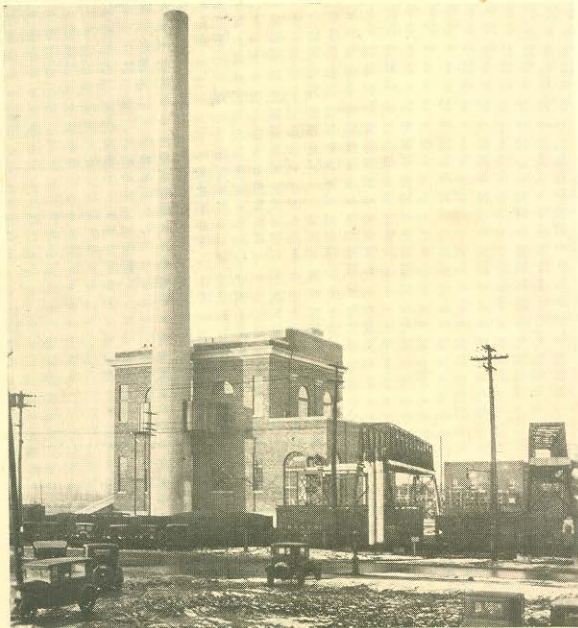
Friday, May 1

- 12:00 m. Luncheon
- 2:00 p.m. Sightseeing Trip
- 7:00 p.m. The Meeting Dinner

PROGRAM—North Eastern District Meeting

Wednesday, April 29

- 9:00 a.m. Registration
- 10:00 a.m. Welcome Addresses:
Stephen B. Story
City Manager
Virgil M. Palmer
Rochester Engineering Society
- 10:20 a.m. **Session on Selected Subjects**
E. C. KARKER, *Chairman*
- Temperatures in Electric Power Cables under Variable Loading
✓ E. A. Church
Edison Electric Illuminating Company of Boston
- Proximity Effect in Cable Sheaths
✓ H. B. Dwight
Massachusetts Institute of Technology
- Cusps in the Speed-Torque Curves of Induction Motors Due to Space Harmonics
✓ P. H. Trickey
Westinghouse Electric & Mfg. Co.
- Losses in Transformers for Use with Mercury Arc Rectifiers
✓ E. V. DeBlieux
General Electric Co.



Station 9 of the Rochester Gas & Electric Corp.

- 2:00 p.m. **Session on Selected Subjects**
Professor R. F. CHAMBERLAIN, *Chairman*
- Theory of Thermal Breakdown of Solid Dielectrics
✓ P. H. Moon
Massachusetts Institute of Technology
- The Three Circuit Transformer
✓ G. F. Estwick
General Railway Signal Co.
- Core Loss Measurements at High Flux Density
✓ B. M. Smith and C. Concordia
General Electric Co.
- Equivalent Circuits of Imperfect Condensers
✓ G. L. Dawes and W. M. Goodhue
Harvard University

8:00 p.m. **Informal Reception—dancing and cards**

Thursday, April 30

- 9:00 a.m. **Symposium on Noise**
P. L. ALGER, *Chairman*
- The Measurement of Noise in Electrical Machinery
✓ B. F. Bailey
University of Michigan
- An Indicating Meter for the Measurement and Analysis of Noise
✓ T. G. Castner
Bell Telephone Laboratories, Inc.
- ✓ E. Dietze and R. S. Tucker
American Telephone and Telegraph Co.
- ✓ G. T. Stanton
Electrical Research Products, Inc.
- The Measurement of Machinery Noise
✓ H. B. Marvin
General Electric Co.
- Induction Regulator Noise
✓ J. P. Foltz and W. B. Shirk
Westinghouse Electric and Mfg. Co.
- Magnetic Noise in Synchronous Machines
✓ Q. Graham, P. Milliken and S. Beckwith
Westinghouse Electric & Mfg. Co.
- Elastic Supports for Isolating Rotating Machinery
✓ E. H. Hull and W. C. Stewart
General Electric Co.
- Noise Mitigation in Substations
✓ E. A. Bishop
Commonwealth Edison Co.
- 12:00 m. **District Executive Committee Luncheon**
- 2:00 p.m. **Inspection Trips:**
Bausch and Lomb Optical Company
Stromberg-Carlson Telephone Mfg. Co.
Monroe Telephone Exchange
Kodak Park Works, Eastman Kodak Co.

2:00 p.m. **Symposium on Noise**—continued
Demonstration of Noise Measurement Apparatus

6:15 p.m.

**Joint Dinner Meeting of National Noise Study
Committees, Representatives of N.E.L.A.,
N.E.M.A., A.S.M.E., A.I.E.E., and
other organizations**

7:30 p.m.

**Inspection of Eastman Theater and Eastman
School of Music, including a performance**

Friday, May 1

9:00 a.m. **Student Technical Session**

D. C. ROBINSON, Syracuse University, *Chairman*

12:00 m. **Luncheon Conference of Counselors and
Delegates**

Professor C. W. HENDERSON, *Presiding*

2:00 p.m. **Student Inspection Trips**

University of Rochester
Eastman Kodak Company
Station 33, Rochester Gas & Electric Corp.

2:00 p.m. **Symposium on Lightning**

PHILIP SPORN, *Chairman*

Lightning ✓ F. W. Peek, Jr.
General Electric Co.

Lightning ✓ Discharges and Line Protective Measures

R. N. Conwell
Public Service Electric & Gas Co.

✓ C. L. Fortescue
Westinghouse Electric & Mfg. Co.

Lightning ✓ Investigation on the 220-Kv. System of
the Pennsylvania Power and Light Company

Edgar Bell and A. L. Price
Pennsylvania Power and Light Co.

1930 Lightning Investigations on the Transmission
System of the American Gas and Electric
Company

✓ Philip Sporn
American Gas and Electric Co.
W. L. Lloyd, Jr.
General Electric Co.

Lightning Investigation on the Appalachian Electric
Power Company's Transmission System

✓ I. W. Gross
American Gas and Electric Co.

✓ J. H. Cox
Westinghouse Electric & Mfg. Co.

Experimental Studies in the Propagation of
Lightning Surges on Transmission Lines

✓ O. Brune and J. R. Eaton
Consumers Power Co.

Lightning Investigation on Transmission Lines—II

✓ W. W. Lewis and C. M. Foust
General Electric Co.

(Papers for this session have not been received by the Pub-
lication Committee for printing up to the time of going to
press, March 24.)

6:30 p.m. **The Meeting Dinner**

Lecture, presentation of District Prizes and
Entertainment with dancing

Saturday, May 2

8:30 a.m.

Symposium on Lightning—continued

9:00 a.m.

Inspection Trips:

General Railway Signal Company
Station 9 of Rochester Gas and Electric Corp.
Coke Plant of Rochester Gas and Electric Corp.
University of Rochester
Niagara Falls

(Time for leaving will be announced at the meeting)



Plant of the Stromberg-Carlson Tel. Mfg. Co.

INSPECTION TRIPS—North Eastern District Meeting

Inspection trips are scheduled on the program for Thursday afternoon and Saturday morning. In addition several trips for the students have been specially scheduled on Friday at 2:00 p.m. Interesting data pertaining to the various plants which may be visited is given in the following paragraphs.

General Railway Signal Company

The chief products of this plant are automatic block signal systems, electric interlocking, mechanical interlocking, automatic train control systems, car retarder system for hump classification yards, train dispatching system for centralized control of traffic, and highway crossing signals. Small and medium sized brass, bronze, aluminum, and gray iron castings, and electric steel and low carbon steel castings are also manufactured. The plant includes 45 buildings of fireproof steel, concrete, and mill construction, protected by an automatic sprinkler system.

Kodak Park Works of Eastman Kodak Company

This plant employs between 6,000 and 7,000 persons. Its principal products are film, paper, dry plates, and chemicals for photographic work, and Kodaloid, a transparent nitro-cellulose sheeting. Steam is generated for electricity, refrigeration, and for heat supplied to two power houses with a total of 18,500 hp. The refrigeration plant has a total rated capacity equal to approximately 6,500 tons per day. A private water supply has a capacity of upward of 18,000,000 gal. per day. The research laboratory occupies nearly 50,000 sq. ft. of floor space and employs a staff of 140, including chemists, physicists, and photographic experts of wide reputation.

Bausch and Lomb Optical Company

This plant employs approximately 3,040 persons. It manufactures all sizes and types of lenses for optical purposes, spectacle frames, ophthalmic instruments, microscopes, photographic lenses, balopticons, photomicrographic apparatus, telescopes, and military instruments. The plant is self-contained, controlling every process through glass making and scientific computation to the finished product.

Stromberg-Carlson Telephone Mfg. Co.

High quality telephone equipment and radio receiving sets are made at this plant which engages nearly 1,500 employees. The new factory has a floor space of 360,000 sq. ft., many modern features in lighting and ventilation, a steam boiler plant to supply both high and low pressure steam used throughout plant, and a new woodworking department with complete motorization of machinery.

Rochester Gas and Electric Corporation Station No. 9, Lincoln Park

The industrial district on the west side of the City was provided with district steam service through the erection in 1927 of a modern powdered coal steam generating plant. It has two boilers with a present capacity of 90,000 lbs. of steam per hour each, which will be increased to 140,000 lbs. each when the load demands. There is also a 3000-Kw. turbo generator providing low pressure steam to the large factories in the vicinity and by-product electricity to the system.

Rochester Gas and Electric Corporation Gas Manufacturing Plant at Rochester, New York

The active gas making equipment consists of 97 Koppers Becker type by-product coke ovens carbonizing 1100 tons of coal per day and under-fired with producer gas. The entire Rochester gas load is carried with oven gas, and all the coke is marketed in this community for domestic use. The equipment includes the first Dry-Quencher installation in America.

Monroe Central Office

The Monroe Central Office is an up-to-date feature type manual central office, and is one of seven offices serving the city of Rochester. This is the only large system of this type in which the many recent improvements in manual telephone service have been placed in operation. This office was placed in service in January, 1927. It is equipped for 9,000 lines, with a capacity for 10,500, and handles over 86,000 calls per day.



Registration

Members should register in advance by filling in and mailing the enclosed registration card. This will greatly aid the committees making the necessary arrangements for the meeting and enable them to have your badge ready when you arrive at the registration desk.

Hotel Reservations

Reservations at the various hotels may be made by writing to O. L. Angevine, Executive Secretary of the Rochester Engineering Society, 111 East Avenue, Rochester, N. Y. A form for this purpose is enclosed and the rates for the various hotels are tabulated below.

ROCHESTER HOTELS

SAGAMORE HOTEL (Headquarters)

Double	Two in a room—double bed.....	\$3.00 per person
	For extra bed.....	2.00 per person
	With twin beds.....	\$3.50 and 4.00 per person (\$2.00 per person for extra bed)
Single	With bath	4.50
	With bath (limited number of rooms).....	4.00

Note—The Sagamore Hotel has given the above special rates for this Convention.

\$4.00 rooms have tub bath only, balance have combination tub and shower.

HOTEL CADILLAC (Two blocks from Headquarters)

Single	With running water	\$1.50
	With tub or shower	2.00 to 3.00
Double	With running water	2.50
	With shower	4.00 and 4.50
	With tub	5.00
	Twin beds	3.50 to 5.00

SENECA HOTEL (Four blocks from Headquarters)

Single	With running water	\$2.50
	With shower	3.00 to \$4.00
	With tub	3.50 to 5.00
	With combination shower and tub.....	5.00
Double	With double bed and shower.....	4.50 to 6.00
	With double bed and running water.....	4.00
	With double bed and tub.....	5.50 to 6.50
	With twin beds and running water.....	5.00
	With twin beds and shower.....	6.00
	With twin beds and tub.....	7.00
	With twin beds and combination tub and shower..	7.00 and 8.00

FORD HOTEL (Two blocks from Headquarters)

Single	With running water	\$1.25 and \$1.50
	With tub	2.00
Double	With running water	2.00 and 2.50
	Double room with tub	3.00

HOTEL HAYWARD (Four blocks from Headquarters)

Single	With running water	\$1.50 to \$2.50
	With tub	2.50 and 3.00
	With shower	2.50 and 3.00
Double	With running water	3.00 and 3.50
	With tub	3.50 to 4.50
	With shower	3.50 to 4.50
	With twin beds and running water.....	4.00
	With twin beds and tub	5.00
	With twin beds and shower	5.00

POWERS HOTEL (Six blocks from Headquarters)

Single	With running water	\$2.25
	With shower	2.50
	With tub or shower	3.00 to \$4.00
Double	With running water	3.50
	With shower	4.00
	With tub-shower	4.50 to 6.00
	With twin beds and tub or shower.....	5.00 to 7.00

HOTEL ROCHESTER (Seven blocks from Headquarters)

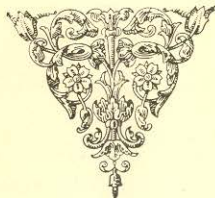
Single	With running water	\$2.00
	With shower	2.50
	With tub	3.00 and \$3.50
Double	With running water	3.00 and 3.25
	With shower	4.00
	With twin beds and shower	5.00
	With double beds and tub	5.00
	With twin beds and tub	6.00 and 7.00

HOTEL CLARIDGE (Five blocks from headquarters)

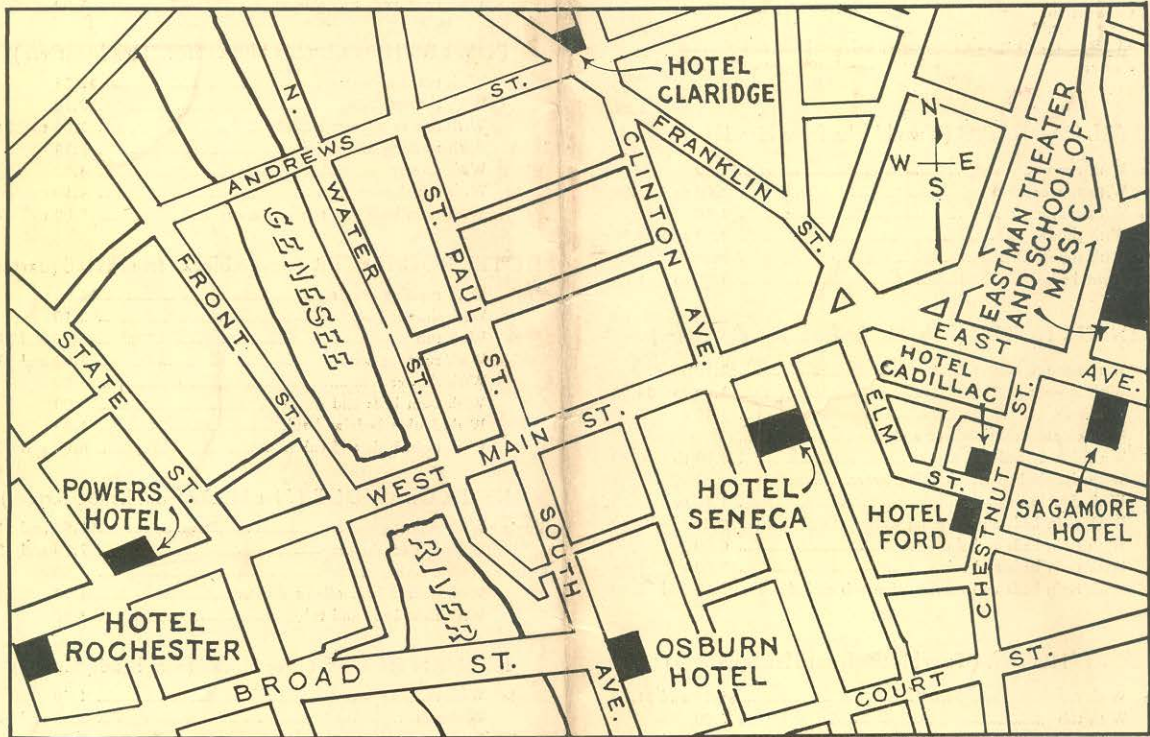
Single	With running water	\$1.50 and \$1.75
	With tub or shower	2.00 and 2.50
Double	With running water	3.00
	With double bed, tub or shower	3.50
	With twin beds and tub	4.00

OSBURN HOUSE (Five blocks from headquarters)

Single	With running water	1.50
	With tub	2.00 and \$2.50
Double	With running water	2.50
	With tub	3.00 and 3.50



Read the June issue of ELECTRICAL ENGINEERING for a complete account of this Meeting.



Business Section of Rochester Showing Hotel Locations

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