

# American Institute of Electrical Engineers

1884

1928

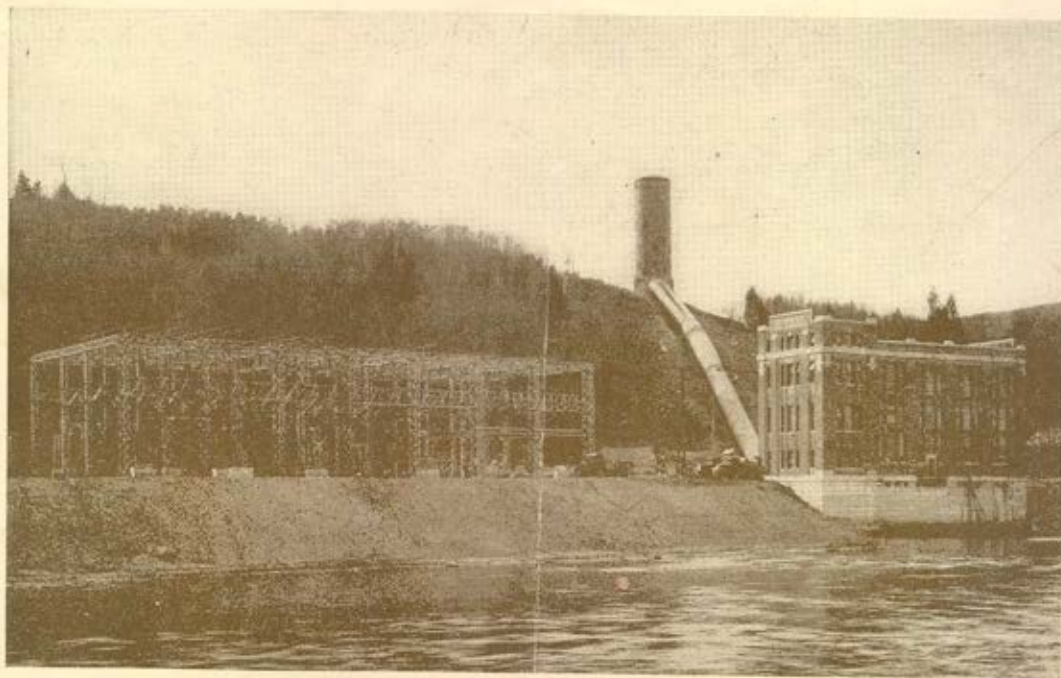
FIFTH

## Regional Meeting *and* STUDENT CONVENTION *of the* NORTHEASTERN DISTRICT

HOTEL TAFT

NEW HAVEN, CONN.

MAY 9 - 12, 1928



*Rocky River Hydro-Electric Plant*

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## *Inspection Trips*

E. J. AMBERG, *Chairman*  
 K. P. Applegate  
 T. J. Russell  
 S. Withington  
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## *Sports*

S. K. WOLF, *Chairman*  
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 Curtis Prout



*Yale Alumni World Memorial Building*

# Regional Meeting at New Haven

May 9-12, 1928

The fifth annual meeting of the Northeastern District will be held at New Haven, Connecticut, on May 9-12. Headquarters will be at the Hotel Taft and the Connecticut Section will act as host. Technical papers of unusual interest, inspection trips, a Branch conference and entertainment make up the well rounded program.

New Haven is easily accessible by excellent train service, fine state roads and motor-bus service. Settled in 1638, it has many points of historical interest; while modern Yale, with its many traditions, its architecturally famous buildings, its Engineering School and laboratories never fails to interest the visitor.

## Technical Sessions

Four technical sessions will be held. The first will be a joint symposium arranged by the Committees on Instruments and Measurements and on Protective Devices dealing with the instruments available for the study and measurement of system disturbances, and the application of protective devices to control their effects on system operation.

A major part of the technical program has been devoted to four unique engineering developments in the vicinity. These include a hydroelectric project, electric railway power from rectifiers, variable-ratio frequency changers and mercury turbines.

A paper will be presented on the exclusive use of mercury arc rectifiers for supplying power to a trolley system, and a second paper on inductive coordination between the railway feeder system and local communication circuits where these rectifiers are in use.

The economics of power supply for railroad electrification will be covered by another paper.

Two very interesting papers will deal with 25-cycle power obtained through two variable-ratio frequency-changer sets, one deriving power from another 25-cycle source, and the second, power from a utility system at 60 cycles.

A hydroelectric development of unusual interest, in which the excess water will be pumped into a storage basin is the subject of another paper. This water will be pumped on some occasions by a portion of the excess water power and on other occasions by steam power from other points on the system.

A paper on the mercury boiler and turbine will be another of this group of unique developments.

Special consideration will be given to "Initial Papers," and the Friday morning session is reserved for papers by Student Branch members. The accompanying program gives detailed information on all the technical papers.



*Branford Court, Memorial Quadrangle, Yale University*

## Inspection Trips

The inspection trips have been coordinated with the technical papers, so that the four unusual developments in the field of hydroelectric plants, railway and street railway power and mercury turbines, may be visited. Visitors will also be able to inspect the latest types of locomotives as now used by the New Haven Road, including the new 1000-hp. 3-cylinder, high-speed electric controlled steam freight type, the motor-generator electric freight type, the d-c/a-c single-phase passenger type, the a-c. freight type and the gas-electric rail car.

Registration for these inspection trips should be made at the registration desk as soon as possible, in order to allow the committee ample time to complete arrangements.

*(continued on page 5)*

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# Program

All technical sessions at Hotel Taft Ballroom, except Wednesday afternoon continuation of symposium.

## Wednesday, May 9

- 9.00 a.m.—Registration
- 10.00 a.m.—Address of Welcome  
H. M. HOBART  
Vice-President, Northeastern District, A. I. E. E.
- 10.15 a.m.—SYMPOSIUM ON SURGE MEASUREMENTS AND PROTECTIVE DEVICES  
Technical Session  
R. T. PIERCE, *Chairman*
- Application of Relays for Protection of Power System Interconnections  
L. N. CRICHTON and H. C. GRAVES  
Westinghouse Electric & Manufacturing Co.
- Application of Wound-Type Current Transformers to High-Voltage Circuit Breakers  
J. C. REA, Pacific Electric Mfg. Co.
- Relation Between Transmission-Line and Transformer Insulation  
W. W. LEWIS, General Electric Co.
- Rationalization of Transmission - System Insulation Strength  
PHILIP SPORN, American Gas and Electric Co.
- Hall High-Speed Recorder  
C. I. HALL, General Electric Co.
- Pages from the Hall High-Speed Recorder  
E. M. TINGLEY, Commonwealth Edison Co.
- Oscillograph Recording of Transmission Line Disturbances  
J. W. LEGG, Westinghouse Electric & Mfg. Co.

## High Speed Graphic Voltmeter

A. F. HAMDI and H. D. BRALEY  
New York Edison Co.

*This Symposium will be continued at 2.00 p.m. in Dunham Laboratory, 10 Hillhouse Ave., with F. L. Hunt, Chairman.*

## 2.00 p.m.—MISCELLANEOUS PAPERS

Technical Session

H. B. SMITH, *Chairman*

Selection of Railway Motor Equipment by Principles of Similar Speed-Time Curves

B. A. WIDELL, General Electric Co.

Shunting of Track Circuit in Polyphase Continuous Inductive Train Control

C. F. ESTWICK, General Railway Signal Co.

## The Diverter Pole Generator

E. D. SMITH, Jr.  
Rochester Electric Products Corp.

Electric Conduction in Hard Rubber, Pyrex, Glass, Fused and Crystalline Quartz

H. H. RACE, Cornell University

## 3.00 p.m.—INSPECTION TRIP

Electric Motive Power Equipment  
N. Y., N. Y. & H. R. R.

## 8.30 p.m.—INFORMAL RECEPTION

Hotel Taft

MUSIC

DANCING

CARDS

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PROGRAM—Continued

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**Thursday, May 10**

9.00 a.m.—RAILROAD AND RAILWAY  
POWER

Technical Session

SIDNEY WITHINGTON, *Chairman*

Interconnection of Power and Railway Traction System by Means of Frequency Changers

L. ENCKE, N. Y., N. H. & H. Railroad

Application of Large Frequency Changers to Power Systems

E. J. BURNHAM, General Electric Co.

Electrification on Illinois Central Railroad

R. F. SCHUCHARDT, Commonwealth Edison Co.,  
and W. M. VANDERSLUIS, Illinois Central R. R.

Mercury Arc Rectifier Substations

G. E. WOOD, The Connecticut Co.

Effect of Street Railway Mercury Arc Rectifiers on Communication Circuits

C. J. DALY, Southern New England Telephone Co.

2.00 p.m.—INSPECTION TRIPS

1. Mercury Arc Rectifier Substations  
The Connecticut Company (Bridgeport)
2. Frequency Converter Substations  
The Connecticut Company (New Haven)  
The Conn. Light & Power Co. (Devon)

7.00 p.m.—BANQUET

**Friday, May 11**

9.00 a.m.—STUDENT BRANCH SESSION

12.30 p.m.—Branch Conference Luncheon

12.30 p.m.—POWER DEVELOPMENTS

Technical Session

WILLIAM S. GORSUCH, *Chairman*

*The lectures at this session will be illustrated with charts and slides and will include material not incorporated in the printed papers.*

The Mercury Boiler and Turbine

L. A. SHELDON, General Electric Co.

The Rocky River Development of the Connecticut Light and Power Co.

E. J. AMBERG, Connecticut Light and Power Co.

4.30 p.m.—INSPECTION TOUR

Yale University

8.00 p.m.—THEATRE PARTY—Courtesy of The Department of Drama, School of Fine Arts, Yale University.

**Saturday, May 12**

8.30 a.m.—INSPECTION TRIP

Mercury Boiler and Turbine  
Hartford Electric Light Co.

Hartford Hump Yard, Electric Braking  
N. Y., N. H. & H. R. R. Co.

9.00 a.m.—INSPECTION TRIP

Rocky River Hydro-Electric Development  
Connecticut Light and Power Company  
New Milford

At Rocky River, on the Housatonic, this hydro-electric development is nearing completion. It is the first development in the United States where flood water is to be pumped to an elevated storage reservoir. The result will be a complete economic utilization of the entire river below this point.

## STUDENT PROGRAM

**Friday, May 11**

9.00 a.m.—SYMPOSIUM ON STUDENT  
BRANCH ACTIVITIES  
R. F. SCOTT, *Student, University of  
Maine, Chairman*

The Institute and the Student Branches  
PROFESSOR H. B. SMITH  
Worcester Polytechnic Institute

What Branch Membership Can Do for the Students  
C. F. EASTERBROOKS  
Student, Rhode Island State College

What Services Can a Student Branch Render to the  
College?

REO MILES, *Student, Syracuse University*

Planning and Publicity for Meetings  
G. L. BOGERS, *Student, Clarkson College*

General Discussion of Branch Activities

Summary of Symposium

PROFESSOR C. F. SCOTT, *Yale University*

10.30 a.m.—STUDENT TECHNICAL SESSION  
W. J. BROWN, *Student, Yale University,  
Chairman*

The Thermal Conductivity of Wood-Pulp Insulation  
in High-Voltage Cables

K. A. REEVES and J. A. WOOD  
Cornell University

Resonance Phenomena in Circuits Containing Iron  
Core Inductance

W. M. HALL and H. F. KRANTZ  
Mass. Inst. of Technology

The Constant-Impedance Circuit Applied to Watt-  
meter Calibration

C. J. AUGUSTING, *Yale University*

Some Characteristics of Photoelectric Cells

W. F. HESS, *Rensselaer Polytechnic Institute*

Servicing the Electric Consumer

C. W. BRIDEN, *Brown University*

A Comparison of Methods of Crest-Voltage Measure-  
ments

W. J. BROWN and BLAIR FOULDS  
Yale University

12.30 p.m.—LUNCHEON CONFERENCE  
Counsellors and Incoming Chairmen of  
Student Branches

2.00 p.m.—REGULAR TECHNICAL SESSION  
OF THE INSTITUTE (See page 3)  
Students are cordially invited to attend  
this session

8.00 p.m.—THEATRE PARTY

**Saturday, May 12**

8.30 a.m.—HARTFORD INSPECTION TRIP  
(See page 3)

9.00 a.m.—ROCKY RIVER INSPECTION  
TRIP (See page 3)

## LADIES' PROGRAM

**Wednesday, May 9**

9.00 a.m.—Registration  
11.00 a.m.—Visit to Memorial Quadrangle and Old  
Campus, Yale University

3.00 p.m.—Auto drive to West Rock Park and  
Judges Cave. Tea at Giant Valley  
Country Club

8.30 p.m.—Informal Reception, Dancing and Cards.

**Thursday, May 10**

10.00 a.m.—Visit to the Gallery of the Yale School  
of Fine Arts.

11.30 a.m.—Visit to the Rebecca Darlington Stoddard  
Collection of Greek and Italian Vases,  
Collection of Autograph Letters and En-  
gravings of Eminent Yale Men, and the  
Steinert Collection of Musical Instru-  
ments.

3.00 p.m.—West Shore Drive. Tea at Race Brook  
Country Club.

7.00 p.m.—Convention Dinner.

**Friday, May 11**

9.30 a.m.—East Shore Drive to Guilford, visiting  
"Old Stone House," "Whitfield House,"  
and other places of interest.

3.00 p.m.—Visit to the Collection of Babylonian  
Antiquities and the Peabody Museum.  
Tea at the Nathan Hale Inn.

8.00 p.m.—Theatre Party. Courtesy of Department  
of Drama, School of Fine Arts, Yale  
University.

**Saturday, May 12**

9.00 a.m.—Auto drive and inspection trip to the  
Rocky River Hydro-Electric Develop-  
ment, New Milford, Conn.

## HOTEL RATES

	Single Rooms		Double Rooms	
	<i>Without Bath</i>	<i>With Bath</i>	<i>Without Bath</i>	<i>With Bath</i>
*Hotel Taft	\$4.25*	\$4.75*	\$7.50*	\$9.00*
		5.00*	8.00*	10.00*
(Three or more sharing large room with bath and separate beds—rate per person \$4.00)				
Hotel Duncan	\$2.00	\$3.00	\$3.50	\$5.00
			4.00	6.00
Hotel Garde	\$2.50	\$3.50	\$5.00	\$6.00
Hotel Strand	\$1.50	\$3.00	\$3.50	\$5.00
	2.00		4.00	

\*Note: Hotel Taft rates include breakfast.  
Make all advance reservations direct with  
Hotel Manager as soon as possible.

## Entertainment

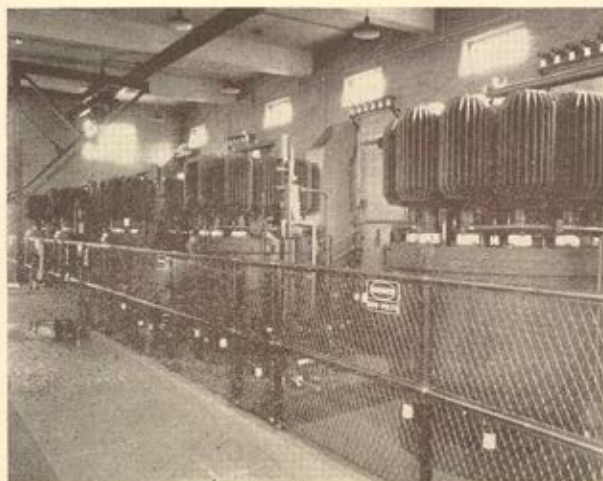
On Wednesday evening, May 9, there will be an informal reception with music and dancing or cards, as one desires.

On Thursday evening an informal banquet for delegates, members and their ladies will be given.

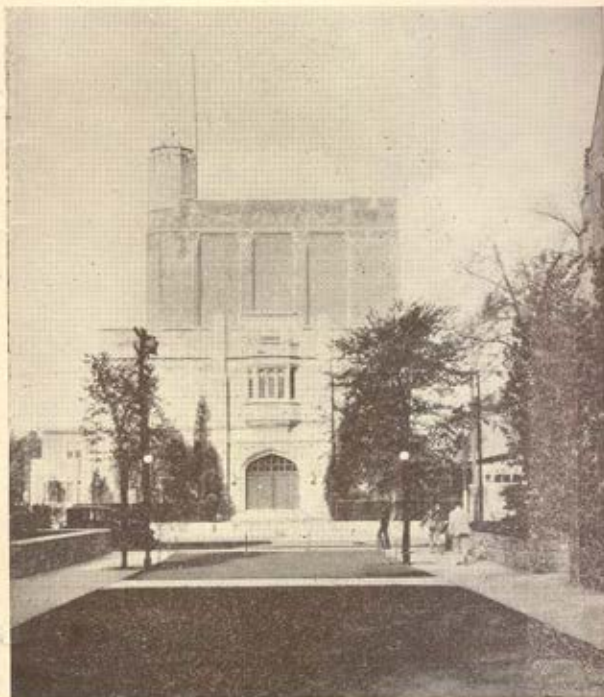
On Friday evening the Yale University Department of Drama will give a complimentary performance at the University Theatre. Guides will be available for those desiring to inspect the University buildings.

A ladies' committee has been appointed to provide entertainment for the visiting ladies during the technical sessions and will include bridge parties, teas and automobile drives along the Connecticut Shore. A schedule of events for the ladies is published on another page.

Three excellent golf courses, including the famous Yale Course, and tennis courts are available for those attending the convention. A golf tournament will be held the first two days of the convention, for which the committee announces prizes for the winners. The Yale gymnasium and its swimming pool will be open to convention visitors.



*Mercury Arc Rectifiers at Bridgeport*



*Yale University Theater*

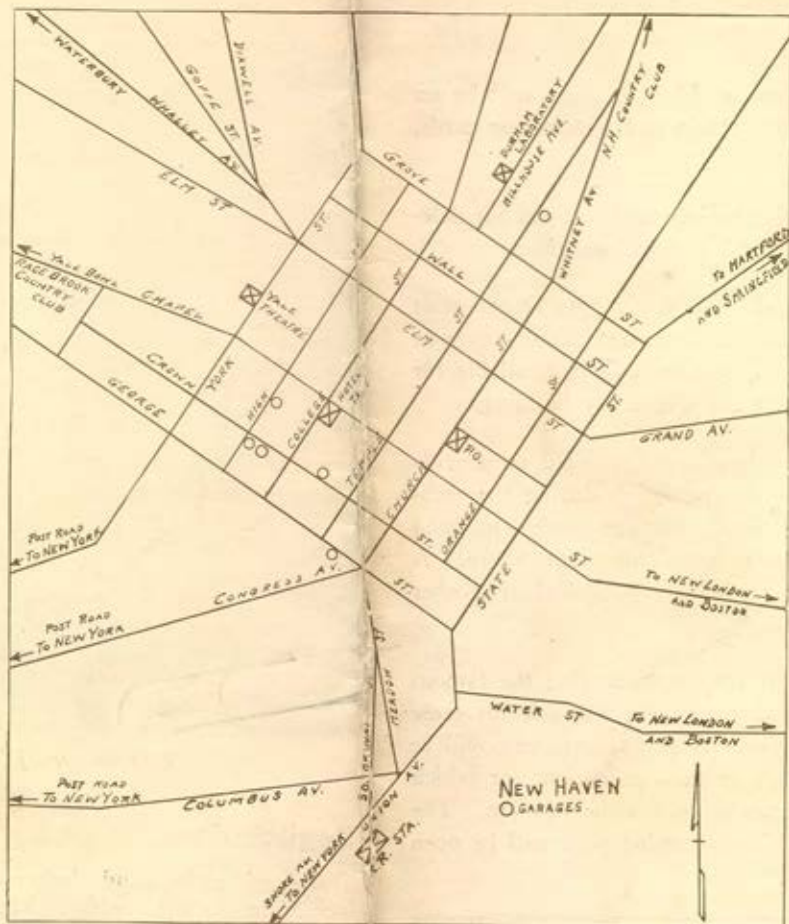
## Registration

A registration and information bureau will be located in the hotel lobby. Members are requested to register in advance as far as possible by means of the postcard accompanying this announcement. In order to cover part of the necessary expenses incidental to the convention, a nominal registration fee of \$1.00 will be required of the men at the meeting. Registration cards for the inspection trips, theatre and banquet tickets, etc., may be obtained at the bureau.

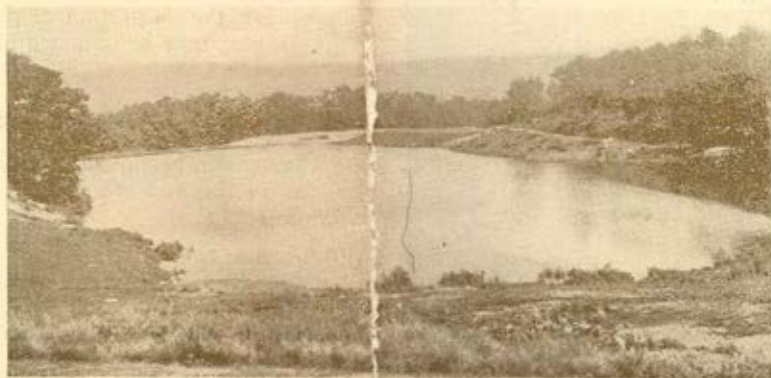
## Hotel Accommodations

Convention headquarters will be at the Hotel Taft. Rates for this and other hotels are given on page 4 of this folder.

Advance reservations should be made direct with the hotel at as early a date as possible.



Map of New Haven



Lake on Yale Golf Course