

ROBINSON, Department of Chemical Engineering, Massachusetts Institute of Technology.

Heat transfer in enamel-lined equipment: E. P. POSTE, Elyria Enameled Products Co.

Forced convection of heat in cases and liquids, II: C. W. RICE, Research Laboratory, General Electric Co.

The film concept of heat transmission applied to a commercial water heater: D. K. DEAN, Alberger Pump and Condenser Co., Boston.

Characteristics of air blast heaters: F. R. ELLIS and J. D. WHITE, B. F. Sturtevant Co., Hyde Park, Mass.

Heat transfer from bare and insulated pipes: R. H. HELLMAN, Mellon Institute of Industrial Research.

Loss of heat from furnace walls: R. CALVERT and LYLE CALDWELL, the Celite Company, Lompoc, Calif.

Optimum operating conditions for pipe heating and cooling equipment: W. K. LEWIS, J. T. WARD and E. VOSS, Chemical Engineering Department, Massachusetts Institute of Technology.

A heat meter: PERCY NICHOLS, Research Laboratory, U. S. Bureau of Mines Experiment Station, Pittsburgh.

Heat losses from various shapes: L. B. McMILLAN, Johns-Manville Co., New York City.

Evaporator design: W. L. BADGER, Department of Chemical Engineering, University of Michigan.

Practically all of the papers of this symposium, which will occupy all of Tuesday afternoon and Wednesday morning, have been preprinted and distributed to the paid members of the industrial division. By this method it is anticipated that much valuable discussion will take the place of the formal reading of the papers. It is planned to edit this discussion and print it at a later date. This symposium promises to be one of the most important which the division has ever held.

THE YALE SCHOOL OF FORESTRY

SAGE HALL, the building of the Yale School of Forestry, was dedicated on February 23. The building, one of the finest of its kind in the country, is the gift of William H. Sage, Yale, 1865, Albany, in memory of his son, De Witt Sage. Mr. Sage, who was unable to be present at the dedication, was represented by his son, Henry W. Sage, Yale, 1895.

Dean Henry S. Graves, of the School of Forestry, presided at the formal dedicatory exercises. The keys to the building were accepted by President James Rowland Angell in behalf of the university. The program included a short address by the architect, William Adams Delano, Yale, 1895, of New York City. The principal address was made by Professor James W. Toumey, former dean of the school.

At the close of the formal exercises the alumni and other guests inspected the building, reassembling at 3:30 P. M. for a program of addresses on forestry subjects by foresters of prominence in their fields. These included Earl H. Frothingham, director of the

Southern Appalachian Forest Research Station of the United States Forest Service; Professor John S. Ferguson, for many years director of forest education in the Pennsylvania State College of Agriculture and Mechanic Arts; Rufus S. Maddox, head of the State Forest Research Service in Tennessee, and Ferdinand A. Silcox, formerly of the United States Forest Service.

SCIENTIFIC NOTES AND NEWS

THE Nichols Medal of the New York Section of the American Chemical Society was presented to Professor Charles A. Kraus, of Brown University, at the Chemists' Club on March 7. Presentation addresses were made by Dr. Clarke E. Davis, Dr. F. G. Cottrell and Professor Marston T. Bogert, and Dr. Kraus made an address on "The theory of radicals as applied to modern chemistry."

A CHAPTER of Sigma Xi was installed at the University of Virginia on February 28. Professor F. K. Richtmyer, of Cornell University, president of the national society, made an address on "X-rays and the structure of the atom."

PROFESSOR MICHAEL I. PUPIN, of Columbia University, delivered the first annual Willard Gibbs memorial lecture under the auspices of the American Mathematical Society in the Engineering Societies Building, on February 29. His subject was "Coordination."

ON the evening of February 11, the seventy-seventh anniversary of the birth of Thomas A. Edison, an address in celebration of the occasion was broadcasted by L. D. Gibbs, chairman of the public speaking committee of the National Electric Light Association.

A TESTIMONIAL number of *The Boston Medical and Surgical Journal*, dedicated to Dr. John P. Sutherland, dean-emeritus of Boston University School of Medicine, has been issued. The contributors to the number are members of the faculty of the school of medicine with the exception of Dr. Murray P. Horwood, who was formerly instructor at the school and is now teaching at Massachusetts Institute of Technology. Among the faculty members whose articles appear in the number are the following: Dean Alexander S. Begg, Dr. W. H. Watters, Dr. David W. Wells, Dr. Leroy M. S. Miner, Dr. Charles T. Howard, Dr. Samuel R. Meaker, Dr. Allan Winter Rowe, Dr. Sanford B. Hooker, Dr. David L. Belding, Dr. Frederick A. Pratt, Dr. Charles H. Lawrence, Dr. Walter L. Mendenhall and Dr. Solomon C. Fuller.

THE annual general meeting of the Physical Society of London, held on February 8, was marked, as we learn from *Nature*, by the presentation to Professor