

spectrum, including X-rays," by R. A. Millikan, D. L. Webster, Wm. Duane and A. W. Hull.

The programs consisted of thirty-four papers, six of which were read by title only, presented at four different sessions. The program of eight papers given at the session of Wednesday morning, consisted exclusively of papers relating to acoustics. The average attendance was about eighty-five, the maximum being about one hundred and twenty-five. The program was as follows:

Variation of transparency to total radiation with temperature of source: S. LEROY BROWN.

The dissipation of heat by various surfaces in still air: T. S. TAYLOR.

The influence of air velocity and the angle of incidence on the dissipation of heat: T. S. TAYLOR.

The measurement of thermal expansion of metals at ordinary temperatures: CHARLES D. HODGMAN.

A method for determining the photographic absorption of lenses: G. W. MOFFITT.

Defects in centered quadric lenses: IRWIN ROMAN.

The sinker method applied to the rapid and accurate determination of specific gravities: N. W. CUMMINGS. (Read by title.)

Amplification of currents in the Bunsen flame: C. W. HEAPS.

A new type of non-inductive resistance: H. L. DODGE.

Some laboratory uses for the contract rectifier: J. C. JENSEN.

An undamped wave method of determining dielectric constants of liquids: W. H. HYSLOP and A. P. CARMAN. (Read by title.)

Difficulties in the theory of rain formation: W. J. HUMPHREYS.

A physical theory of ocean or reservoir temperature distributions, regarded as effects of solar radiation, evaporation and the resulting convection: GEO. F. McEWEN.

Electromagnetic induction and relative motion: W. F. G. SWANN.

The influence of blowing pressure on pitch of organ pipes: ARTHUR C. LUNN.

A photographic study of explosions in gases: JOHN B. DUTCHER.

A photographic study of sound pulses through crooked and curved tubes, with deductions concerning telephone mouthpieces, phonograph horns, etc.: ARTHUR L. FOLEY.

A photographic method of measuring the instantaneous velocity of sound waves at points near the source: ARTHUR L. FOLEY.

A possible standard of sound—I., study of operating conditions; II., study of wave form: CHAS. T. KNIPP.

The performance of conical horns: G. W. STEWART.

A photographic study of the wave-form of sounds from large guns in action: DAYTON C. MILLER.

The calibration of a Kund chamber and sound sources and the measurement of sound transmission of simple partitions: PAUL E. SABINE.

Transmissions of sound through walls: F. R. WATSON.

Charcoal absorption and cyclic changes: THOS. E. DOUBT.

The heat of vaporization and work of ionization: C. S. FAZEL. (Read by title.)

Energy content of characteristic radiations: CHESTER W. RICE.

The spectrum of radium emanation: R. E. NY-SWANDER, S. C. LIND and R. B. MOORE.

The Zeeman effect for electric furnace spectra: ARTHUR S. KING. (Read by title.)

Critical potentials of the "L" series of platinum: DAVID L. WEBSTER.

On the possibility of pulling electrons from metals by powerful electric fields: R. A. MILLIKAN and B. E. SHACKELFORD.

On the recoil of Alpha particles from light atoms: L. B. LOEB. (Read by title.)

Reactive hydrogen in the electrical discharge: GERALD L. WENDT and ROBERT S. LANDAUER. (Read by title.)

The construction and design of a device permitting the application of a current pulse for a predetermined number of milliseconds: LYNDLEY PYLE.

The spectral transmission of various glasses: HENRY P. GAGE.

DAYTON C. MILLER,
Secretary

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