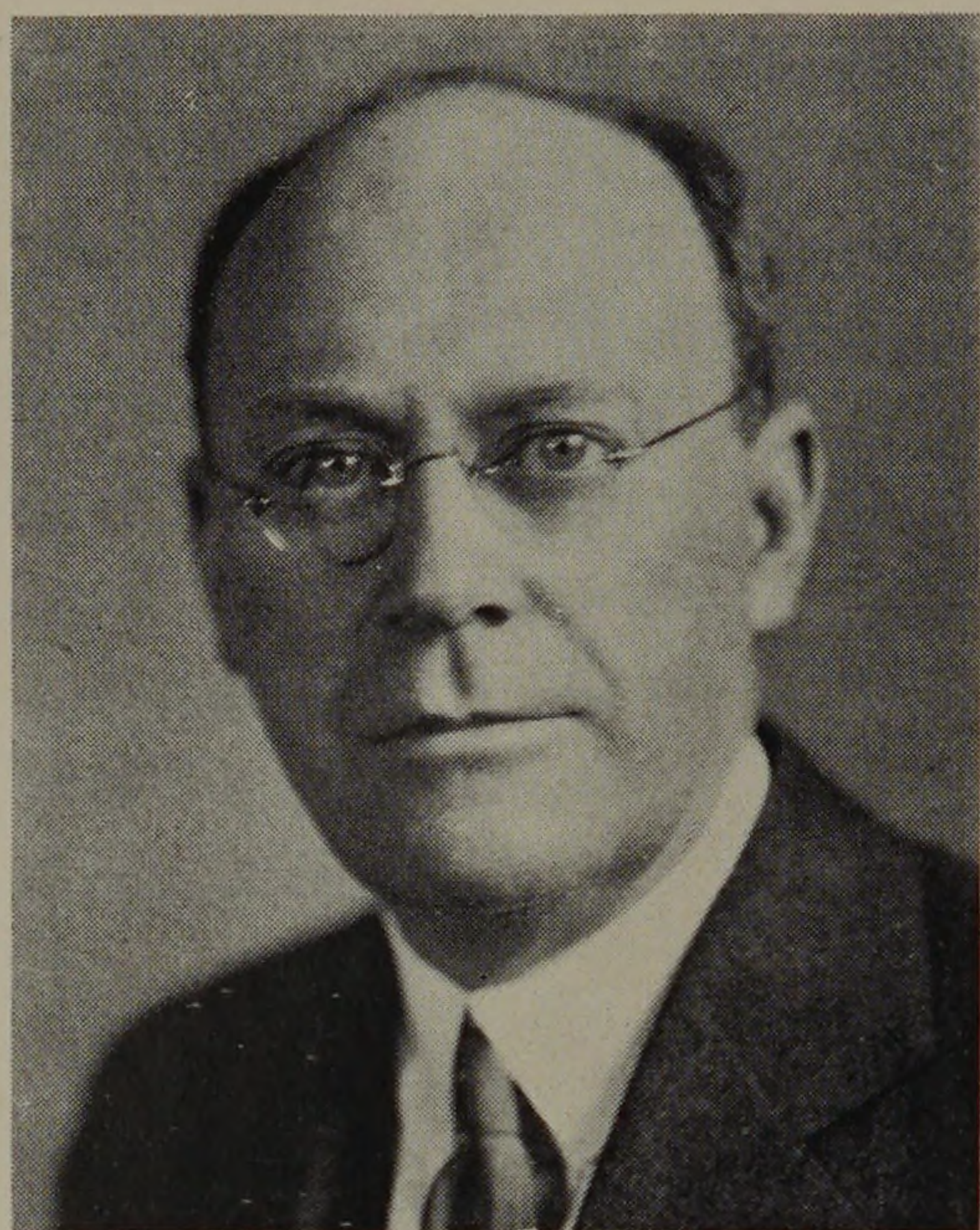




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During the present school year the work of the department has proceeded satisfactorily, with no radical changes in curriculum and methods, but with the progressive changes in details of course content that are desirable to keep abreast of developments in the field. For several years increasing attention has been given to fire hazards and fire protection in buildings in course of construction; to the grave problems involved in the widespread use of pyroxylin lacquers applied by spraying processes; to the hazards of nitrocellulose films used in x-ray and portrait photography; to the use of new and hazardous anesthetics in hospitals; to the fire protection of hangars and other properties at air ports; to the many new designs of equipment for automatic sprinkler installations, particularly of heat-sensitive devices and of dry-pipe valve accelerating devices; and of valves for high-pressure standpipe systems. In the discussion of insurance, time has been given to a consideration of recent changes of practice in the use of "reporting forms"; to the marked increase in the activity of inland marine insurance departments in writing policies providing broad coverage; and to the assumption of liability for damage due to inherent explosion hazard and to smudge in dwellings, the latter two coverages being now more important than formerly on account of

DEPARTMENT OF FIRE PROTECTION ENGINEERING

the considerable use of oil and of gas for domestic heating.

Students in fire protection engineering are registered in many courses given by other departments at the Institute, in some cases for fundamental humanistic, scientific, or engineering subjects, in others for instruction specially organized for fire protection engineers. In all cases this department has had most satisfactory cooperation.

The professional laboratory work of the department continues to be carried on at the well-equipped plant of Underwriters' Laboratories, the testing station of the National Board of Fire Underwriters. During the past year the hydraulic equipment at the Laboratories has had important additions. An Allis-Chalmers centrifugal pump, with a rated capacity of 1000 gallons per minute at 500 pounds pressure, is driven by a direct-connected 2300-volt alternating-current motor rated at 600 horse-power, with variable speed controller. The discharge line is provided with a 3-inch and an 8-inch Venturi meter with a direct-reading manometer. A Republis flow-meter with direct-reading dial has been installed to measure flows in pipes of various sizes from 2½ to 8 inches.

