

# NEWS OF THE MONTH

## Interstate Commerce Commission Fifty Years Old

A program celebrating the fiftieth anniversary of the Interstate Commerce Commission, held at the departmental auditorium, Constitution avenue at Thirtieth street in Washington, D. C., April 1, included talks by George M. Crosland, Allan P. Matthew, John E. Benton, Clyde B. Aitchison, Patrick J. Farrell, John J. Esch, Clarence F. Lea, Sam Rayburn, and Burton K. Wheeler. The morning session was presided over by Joseph B. Eastman, the afternoon session by Frank McManamy, and the evening session by Balthaser H. Meyer. The exercises were concluded by the reading of a message from the President of the United States. The Act of 1887 creating the Interstate Commerce Commission was intended primarily to prevent unreasonable and discriminatory rates and practices on the part of railroads. In 1893, the Safety Appliance Act was passed, of which the present Bureau of Safety is an outgrowth. The work of the commission has been amplified and extended by the passage of several acts, with the result that many phases of various types of transportation now come under its jurisdiction.

## Crossing Accidents In 1936

Fatalities resulting from accidents at highway-railroad grade crossings were greater in 1936 than in any year since 1931, "despite the efforts of the railroads and the various safety organizations to impress upon the public the necessity for exercising greater precaution in approaching and passing over such crossings," says a statement from the Safety Section of the Association of American Railroads.

These 1936 reports showed that 1,786 persons were killed in highway-railroad grade crossing accidents during that year—an increase of 106 compared with 1935, and of 232 compared with 1934. In 1931, there were 1,811 fatalities.

Persons injured in such accidents in 1936 totaled 4,930 compared with 4,658 in 1935 and 4,300 in 1934. Accidents at highway-railroad grade crossings in 1936 involving casualties totaled 4,277, an increase of 344 compared with 1935, and an increase of 549 compared with 1934.

"In the past five years," the statement concludes, "there has been an almost constant increase in the number of fatalities

resulting from accidents at grade crossings, although the number of such fatalities is somewhat less than the annual average for the period from 1923 to 1930, inclusive, in each of which years more than 2,000 persons lost their lives in such accidents. That the extensive safety campaigns conducted in recent years by the railroads, as well as motor and other organizations, has brought about an improvement in the situation in respect to grade crossing accidents is shown by the fact that whereas the number of fatalities resulting from highway-railroad grade crossing accidents in the six-year period from 1925 to 1930, inclusive, was 14,141, the total for the six-year period from 1931 to 1936, inclusive, was 9,867."

## Federal Grade Crossing Program

The \$200,000,000 federal program for eliminating the hazards at railway-highway grade crossings is steadily moving ahead. Grade crossing projects to the extent of \$58,486,577 have been completed under the program; another group of such projects involving an estimated expenditure of \$102,853,221 is under construction and still another group, involving an estimated expenditure of \$14,049,376, has been approved for early construction. All but \$24,171,908 has now been assigned definitely to specific projects.

## Selection of Colors for Signal Lights

Research paper RP956, published by the National Bureau of Standards covering "Selection of Colors for Signal Lights" by Harry J. McNicolas is available from the Superintendent of Documents, Washington, D. C., at 10 cents a copy. Various colored lights produced by combinations of a tungsten-filament lamp and commercially available colored-glass light filters were tested for efficiency and accuracy of identification in each of two six-color signal systems consisting, respectively, of red, orange-yellow, white, green, blue, and purple lights, and of red, orange, yellow, white, green, and blue lights. The tests were made by 38 normal observers on an outdoor range of 950 ft., for different weather conditions and signal intensities. Comparison between the two systems under prescribed service conditions showed that the use of purple with adequate lamp intensity is preferable to the use of both orange and yellow with red and white. Partial chromaticity

tolerances and minimum lamp intensities have been determined for the six-color system containing purple.

## Grade Crossing Problem

Thomas H. MacDonald, Chief, United States Bureau of Public Roads, presented a paper on the subject of the grade crossing problem before the recent convention of the American Railway Engineering Association in Chicago. This paper, which was published in complete form in the *Railway Age* of March 27, discusses in detail the program of the United States government in improving safety at highway-railroad grade crossings from the standpoint of grade separations as well as protective devices.

The first authority to carry the whole construction costs of such improvements from federal funds was given in July, 1933. Under the provisions of the National Recovery Act of 1933, 697 grade separations were constructed and 706 grade crossings were protected by automatic warning devices. In 1935 funds were made available specifically for work of this character and under this authorization a total of 854 grade crossings have been eliminated, 881 eliminations are under construction and 371 are programmed for construction, a total of 2,106. In addition, 343 existing grade separation structures are being rebuilt and protection with automatic warning devices of 1,204 crossings has been accomplished or provided for. Thus in a period of 3½ years, 3,146 crossings have been eliminated, including the rebuilding and reconstruction of the 343 obsolete and dangerous crossing structures, and a total of 1,910 standard protection signals have been provided for or actually installed.

Although approximately 1,200 grade crossings have been eliminated annually during the last three years, at this rate 190 years would be required to wipe out the 234,000 existing crossings in the United States. For this reason, Mr. MacDonald explains that many of the crossings in the lower hazard classification must, of necessity, be continued in service for years to come and, therefore, there must be better crossing protection devices which can be installed in large numbers and which must necessarily have a low-cost range. There are promising developments in this field of simple, cheaply-installed devices, in which the

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