

SHORT COURSE IN HIGHWAY ENGINEERING.

The last Illinois legislature passed a law regarding roads and bridges which introduced new principles and methods concerning the construction and maintenance of roads and bridges; and the law also created the offices of county superintendent of highways, and provides for the possible appointment of township or district superintendents of highways. In view of the new principles of administration introduced by this law, and also in consideration of the entirely new duties devolving upon the county and township superintendents of highways, and further, on account of the recent radical changes in the methods and materials of hard road construction, due to the increasing use of automobiles, the Civil Engineering Department of the University of Illinois will offer a course in highway engineering from January 19th to January 31st, 1914.

There will be no charges of any kind by the University; and the course will be open to anyone, without examination or other condition, who aspires to be appointed to the position of either county or township superintendent of highways, and to any others interested in the maintenance or construction of roads.

The lectures will cover the various phases of highway engineering; and will be given by members of the staff of the Civil Engineering Department of the University of Illinois, and by Mr. A. N. Johnson, State Highway Engineer, and members of the staff of the Illinois Highway Commission. The laboratory exercises are to show the methods of testing and using the materials employed in ordinary road construction, such as hydraulic cement, concrete, tar, asphalt, road oil, etc. It is expected to have several pieces of road machinery on exhibition with experts in charge to explain the manipulation and method of using each. In the evenings there are to be semi-popular lectures, which will be instructive to highway engineers and others interested in road improvement.

AMERICAN MANUFACTURE OF DIESEL ENGINES

Most of the important European manufacturers of large steam and gas engines are largely concentrating their energies on building Diesel engines, and have such a large number of orders that to make prompt deliveries is practically impossible. It has for some time been a subject of much comment in view of the highly successful business being done in the Diesel engines by many European concerns, that no attempt has been made to build in America a full line of Diesel engines of a design which has proved to be a commercial success in actual use.

It should be remembered that notwithstanding the increase in the price of fuel oil, the actual cost of fuel oil and its relative cost, as compared with coal, is generally much lower on this side the Atlantic than in Europe. Also, that oil suitable for Diesel engines is a by-product which will always be available in ample quantities as long as the present large consumption of gasoline and kerosene exists. Many large new oil fields are also being developed in this country, in the United States and in Mexico.

Not only are Diesel engines said to offer many advantages for central station units, factory and other isolated power plants, and railway service, but are particularly desirable for marine work, where weight and space saved is of prime importance. The Diesel oil engine eliminates the boilers, with their necessary handling of coal and ashes; also pumps, and many other accessories characteristic of steam equipment. The space so saved, and the coal-bunker space, can be used for cargo, and the liquid fuel, handled

by pumps, and requiring less than one-third of the room required for coal, can be stored in the ship's double bottom. In view of these facts, there seems to be no reason why there should not be a broad field for this type of engine.

An announcement has just been made that a corporation has been formed with a New York State charter to engage in the manufacture on an extensive scale of a full line of Diesel engines, both stationary and marine, for the American countries. In addition to American interests, the company has behind it a number of Swedish capitalists, who now control the Swedish Diesel Motor Company (Aktiebolaget Diesels Motorer), which company started building these engines in 1898, and many of their designs of the most important features peculiar to this type of engine, such as fuel pump, atomizer, details of pistons, etc., have been adopted by other European builders.

The new corporation will take over the plant and organization of the McIntosh & Seymour Company, of Auburn, N.Y., builders of steam engines, and the construction of both types will proceed under the one organization, the name of which has been changed to McIntosh & Seymour Corporation. Mr. Edwin S. Church, formerly superintendent of the Akron plant, International Harvester Company, will be president; Mr. J. A. Seymour, formerly president of the McIntosh & Seymour Company, will be vice-president, with charge of engineering.

AGRICULTURAL ENGINEERS.

The American Society of Agricultural Engineers is holding its Seventh annual convention in Chicago, Dec. 29th to 31st, 1913. From a lengthy program we select the following items as of special interest to municipal officials, irrigation engineers and those more closely connected with rural development:—

- (1) Farm Sanitation, with Special Reference to Water Supply and Sewage Disposal.—Paul Hansen, Engineer, Illinois State Water Survey.
- (2) The Design of Permanent Farm Buildings.—E. S. Fowler, Universal Portland Cement Co.
- (3) Standardization of Wagon Wheels and Tires.—E. Parsonage, John Deere Wagon Co.
- (4) Concrete in Drainage and Irrigation.—C. W. Boynton, Universal Portland Cement Co.
- (5) Small Motor Applications for Farm Work.—C. J. Rohrer, General Electric Co.
- (6) The Five Winnipeg Motor Contests, and Lessons to be Drawn from Them.
- (7) Address.—C. R. Richards, University of Illinois.
- (8) Extension Work in Agricultural Engineering.—F. M. White, University of Wisconsin.

The secretary, Mr. I. W. Dickerson, Urbana, Ill., states that immediately after the close of the convention a brief summary of the papers and discussions will be prepared and will be sent to any one interested.

The Toronto branch of the Canadian H. W. Johns-Manville Company, Limited, announces its removal to 19 Front Street East. This new store and warehouse has a floor area of approximately 35,000 sq. ft., and is situated in the heart of the wholesale district. In their new quarters this firm will be able to carry a larger stock and have ample space for the display of their complete line of specialties.

The Pedlar People, Limited, of Oshawa, have moved their Toronto branch from Bay Street to a new building at the corner of College and Markham Streets, where they have a greater floor space, and will be able to carry a more complete stock of sheet metal work of all kinds, including culverts, flumes, drains, roofing, fire-doors, metal buildings, etc.