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## A Seven-Day Journal

### The Cheltenham Flyer.

ON Monday last the new Great Western express between Swindon and Paddington came into service. It left Swindon promptly at 3.48—the new schedule time—but instead of arriving at 4.55 in accordance with the time-table, it reached Paddington at 4.47½, having thus covered the 77½ miles in half a minute under the hour. For nearly 70 miles out of the total distance its speed was generally well over 80 miles per hour, and at mile-post No. 2 from Paddington it was 86.7 m.p.h. The average start-to-stop speed was 77.9 miles per hour. The engine was No. 5000, "Launceston Castle," and the train of six coaches weighed 180 tons. For many years the Swindon-Paddington run has been notable. In 1929 70 minutes were allowed by schedule. That timing has now been reduced by 3 minutes, mainly with the object of recovering a little for British railways. In April last the Canadian Pacific Railway put on a flyer between Montreal and Toronto. It covers the 124 miles in 110 minutes in one direction and 108 in the other, giving start-to-stop speeds of 67.6 and 68.9 miles per hour. The new schedule for the "Cheltenham Flyer" brings the start-to-stop time of the railways back to England with an average speed of 69.3 m.p.h., but for a shorter distance than the lighter train. If, however, the astonishing time achieved on Monday and improved on Tuesday is maintained, a good margin on the British side is secured.

### The Rail-bus.

On Monday, September 10th, a demonstration of the rubber-tired railway self-propelled bus, described in our issue of September 14th, was run between Paris and Deauville and back. The ordinary expresses are given 2 h. for the journey, the rubber-tired coach, or "Micheline"—the name now given to the type in France—covering the distance in 2 h. 3 min., or at an average speed of 66 miles per hour, as compared with the ordinary train of 53 miles per hour. The running time is excellent, and there was naturally far less delay than that produced by a train. If there is any doubt about the speed attained by a rubber-tired bus, the test was of interest as showing that it may be run satisfactorily over long distances, and that the rubber-flanged tire can negotiate curves, and other features of railway running.

future," Mr. Hurford concluded, "will be the works manager. In a sense, he will be primarily responsible for Britain's industrial future. His task, however, is full of difficulties, and the community would be well advised to give him every encouragement and to refrain from making unwarrantable reflections on his ability and vision. Honest criticism is welcome and helpful. The works manager is a leader of labour and one of his many tasks is to secure confidence, and unjustifiable attacks upon his ability make his task doubly difficult."

### Asbestos.

THE danger to health arising from exposure to asbestos dust was established by an inquiry conducted last year by the Factory Department of the Home Office. In that report a number of precautionary measures were recommended for the prevention of inhalation of asbestos dust by workmen employed in the industry, the most important of which was the application, both in the textile and non-textile sections, of exhaust ventilation. So far, however, as regarded the textile section, it was evident from the report that further inquiry would be necessary before a decision could be reached as to the best methods to be applied to the various machines in use. A conference was therefore arranged with representatives of the asbestos textile industry, and, as a result, a Committee, consisting of three representatives of the manufacturers and two of H.M. Inspectors of Factories, was set up to consider the best methods which could be adopted generally for the suppression of dust in this section of the industry. This Committee, in April, 1931, made a series of recommendations which were subsequently endorsed by the other representatives of the textile employers. The Secretary of State has decided to give effect to the recommendations contained in these two reports. For that purpose, as required by Section 79 of the Factory and Workshop Act, 1901, he has formally certified as dangerous the manipulation of asbestos and the manufacture or repair of articles composed wholly or partly of asbestos, and processes incidental thereto, and is now issuing, in draft, regulations which follow generally the provisions recommended in the two reports, with certain additions and modifications which have been made after taking into consideration observations submitted by the General Council of the Trades Union Congress.

### The Illumination Congress.

ON Monday, September 14th, the delegates of the Illumination Congress assembled at Cambridge

the Board of Trade, which then sends a surveyor to conduct a preliminary inquiry. If it is then deemed desirable—generally in order to place responsibility—a formal investigation by two Commissioners, one a lawyer and the other an engineer, may be ordered. Since 1882, 3152 explosions have been dealt with. They caused the deaths of 1065 and injuries to 2576 persons. The Report by the Board for the year 1930 has just been published. In that year 55 explosions were the subjects of inquiries, but not a single formal investigation was held. It is satisfactory to note that the number of deaths was the lowest on record, but in recent years fatalities have varied through wide limits. They were as high as 22 in 1924 and as low as 7 in 1925 and 1928. The deaths in 1930 were 5 in number and were caused by four explosions, one at sea and four on land. In only one case was a real boiler concerned: in it the fire-box failed owing to wastage. The other fatal accidents occurred to an old economiser owing to wastage; a steam receiver, over-pressure; a steam chest, water hammer; and at sea, an old copper pipe, vibration.

### The Clyde-built Oil Tanker Imperial Transport.

AT the end of last week successful trials were concluded in the Firth of Clyde of the oil tanker "Imperial Transport," which has been built by the Blythswood Shipbuilding Company, Ltd., of Scotstoun, to the order of the Empire Transport Company, Ltd., which is managed by Houlder Brothers and Co., Ltd., London. The tanker has a length of 460ft., with a beam of 60ft., and a depth of 34ft. 6in., her measurement being about 8000 gross tons, with a 11,500 tons deadweight carrying capacity. She is constructed on the longitudinal system, and is classed with Lloyd's for the carriage of petroleum in bulk. There are eighteen main oil tanks, with a deep tank forward and a dry cargo hold, oil-tight cofferdams being fitted at the ends of the oil cargo holds. The bunkers and cargo tanks are provided with heating coils, and there is a single pump-room with two steam-driven cargo pumps, each of which has a designed duty of 300 tons per hour. Accommodation for the engineers is provided in deck houses on the poop, while the captain and deck officers are housed amidships. The propelling machinery consists of a single North-Eastern four-stroke single-acting oil engine with eight cylinders. The heating steam is furnished by two oil-fired cylindrical type donkey boilers. The trials were carried out in the deep loaded condition, and were, we understand, highly satisfactory, a speed of over 12 knots being obtained.