

PROGRESS ON DEEP WATERWAYS SURVEYS.

Mr. Alfred Noble, a member of the deep waterways commission which is investigating the question of a ship canal from the Great Lakes to the ocean, gave to a reporter this week the following account of progress made on the surveys: "The surveys from Lake Erie to Lake Ontario are now completed. Two routes for the outlet from Lake Ontario are now being surveyed under Assistant Engineers A. J. Himes and D. J. Howell. The Oswego route, from Oswego to the mouth of the Mohawk river at Troy, is surveyed to the extent of 130 miles out of a total distance of 177 miles. The surveys will be completed this fall. The other outlet being considered is by way of the St. Lawrence river to Lake St. Francis, thence across country to King's Bay, near the foot of Lake Champlain, along Lake Champlain to its head at Whitehall, thence across the divide to the Hudson at Fort Edward, and down the Hudson to deep water. Assistant Engineer Charles L. Harrison has just completed surveys of about 40 miles from Troy to Fort Edward, on this line, and the surveys will be extended to deep water in Lake Champlain this season. F. P. Davis has just begun surveys between King's Bay and Lake St. Francis and J. W. Beardsley is investigating the shoal portion of the St. Lawrence river between Lake Ontario and Lake St. Francis. These surveys will probably not be finished this year. H. F. Dose is working with a small party along the Hudson river below Troy. The channel will require deepening for about thirty-five miles." The two other members of the commission are Major C. W. Raymond of the corps of engineers, U. S. A., and George W. Wisner of Detroit.

FIRST LOCOMOTIVE IN ALASKA.

The first locomotive to turn wheels in Alaska pulled out of Skagway on Wednesday, July 20, with two flat cars loaded with rails. At that time seven miles of the roadbed had been graded and over five miles of track laid. Fifteen hundred men are at work in heavy rock cutting at the summit. Two tunnels and much rock work will be necessary before the summit is crossed. It is expected that the track will reach the summit of the pass by Sept. 20. The road is narrow gauge and is being built by the White Pass & Yukon Railroad Company. According to latest accounts the company was arranging for an extensive celebration in the nature of an excursion of several hundred people over the road on Aug. 10 as far as the track was completed.—Railway Review.

A DECLINE IN BRITISH SHIPPING

For the first time in fifty years, or since the repeal of the British navigation laws, the tonnage of the British mercantile marine shows a decline. A Board of Trade return has just been published dealing with British and foreign shipping, which shows that at the end of last year the United Kingdom owned steam and sailing vessels with a capacity of 8,953,171 tons, compared with the 7,978,538 tons of 1890, but as compared with the 9,020,282 tons of 1896 it shows a falling off of more than 67,000 tons. Including the tonnage owned in the British colonies the Union Jack floats over 10,416,442 tons of shipping, which compares with about 4,768,000 tons for the United States, 1,566,558 for Norway, 1,487,577 for Germany, 894,071 for France, 765,281 for Italy, and 756,305 for Spain. According to the report British shipping enjoys 60 per cent. of America's foreign trade, 58 per cent. of Portugal's, 57 per cent. of Russia's, 54½ per cent. of Holland's, 43 per cent. of Italy's, and 38 per cent. of Germany's. British ships last year carried 76 per cent.

of the inward and outward trade of the United Kingdom, as against 78 per cent. in 1895, 79½ per cent. in 1890, and 83 per cent. in 1880. Although the tonnage of British ships fell behind last year, the proportion built for foreigners in British yards was much above the average. The decline is assigned to three causes: An unusually large transfer of British shipping to foreign flags, native builders filling foreign orders at the expense of domestic, and the great engineers' strike.

ANTHRACITE COAL.

Suggestions for improvement of anthracite coal trade conditions furnish fruitful themes for discussion. It seems to be generally admitted that the policy of anthracite producers and of the coal-carrying railroads, which in general terms might be described as forcing upon the market, month by month, a larger amount of coal than it is able to absorb, is as mistaken as it is irremediable. Agreements to restrict production always fail to work for one cause or another, and the trade seems to be one of the few unfavorable spots in a general business situation that exhibits such gratifying tendencies toward improvement. It is, however, claimed by competent observers that the real cure for the disease that affects anthracite coal production must be found in a complete change of methods. In line with this there have been a number of almost revolutionary suggestions, not the least attractive of which is one to the effect that a large proportion of the product of the Pennsylvania mines might be utilized for the production of gas on the largest possible scale direct at the mines.—From Bradstreets.

GENERAL SALESMEN.

A new feature in a few large department stores, and perhaps a number of smaller ones, throughout the country, is the employment of one or two "crack" salespeople in a general capacity throughout the store. By this we mean that a man or woman of unusual ability takes charge of the more important customers, pilots them through the store, waits on them in the different departments, and, in fact, takes complete charge of them from the time they enter the store until they leave it.

Of course, a position of this kind is given only to someone of unusual ability. In fact, the nature of the position is such as to give it a standing and value not even less than that of a department buyer or manager. We are not informed as to whether this plan is operated on any large scale or not, and it must necessarily arouse a certain amount of opposition among department salespeople who feel that their sales might be cut into by the encroachment of an outsider, who would carry off some of the big checks that might be made.—August Counter.

THE SUPPLY OF PULP WOOD.

At the present rate of consumption it might seem as if within a few years there would be a scarcity of pulp wood in the United States and Canada, and that the price of timber should advance to such a degree as to be almost prohibitive. Since 1882 the production of wood pulp has increased twelve-fold. There are now 1,200 large pulp mills in the United States, producing more than 1,500,000 tons of pulp a year, using about 2,000,000 cords of wood in the process. But it should be understood that after the nearer and more accessible timber shall have been cut and manufactured there are vast areas of spruce, poplar, hemlock and other woods in northern Canada that have as yet scarcely been explored.

When the timber shall be required, methods of production and transportation

rates will be provided whereby the remotest resources for pulp wood will be available. In fact, no distance is now too great for commerce to span. Before the pulp wood resources of this continent shall have been exhausted, Siberia, in all its vast extent, can be drawn upon for a supply. Come to think of it, as we survey the entire field, Professor Fernow, or any other forecaster of events, need not fear having to pay a nickel for his morning paper because of a probable scarcity of pulp wood in the future. This generation and the next will not see a lack of necessary paper material. Besides, there are possible substitutes for wood.—From Northwestern Lumberman.

ELECTRICAL APPLIANCES.

Surprising as the development of electricity in practical ways has been during the past twenty years, it requires a statistical exhibition of the subject, particularly on the financial side, to furnish an adequate picture of this progress. A recent examination of the subject furnishes some interesting details. For instance, it is stated that as recently as 1884 the total investment in electrical appliances throughout the United States did not aggregate much over \$1,000,000, while at the present time the total capitalization of electrical railroad, lighting and other concerns is put down as fully \$1,900,000,000. The 14,000 miles of electrical railroads which exist to-day in the United States represent a capitalization, at its par value, of about \$1,000,000,000, while the electric lighting stations and plants in the country are believed to represent an investment of fully \$600,000,000, the capital involved in the telephone business and all its ramifications being placed at not less than \$100,000,000.—Bradstreets.

THE OTHER SIDE.

In reference to the recent convention of lumbermen in Toronto The Northwestern Lumberman says: The presence at the meeting of George W. Stevens, of Buffalo, and William Peter, jr., of Toledo, indicates that the American allies of the Canadian lumbermen are giving active support to the movement to bring the lumber tariff up for discussion before the joint commission. The membership of the commission on the part of the United States is such as to give assurance that fair treatment will be accorded the lumber interests of this country, but it is highly necessary that the claims of American lumbermen be placed before the commission in the proper light. The commission, of course, has no authority to change existing legislation, and its recommendations, whatever they may be, will be subject to approval by congress. But it must be remembered that the free lumber element in this country, although small, is extremely aggressive, and will bear watching.

CURIOUS ENGINE TEST.

Engineers judge of the condition of their machinery by the tone it gives out while running, says The Scientific American. Every engine, whether stationary or locomotive, has a particular tone of its own; the engineer becomes accustomed to that, and any departure from it at once excites a suspicion that all is not right. The engineer may not know what is the matter, he may have no ear for music, but the change in tone of his machine will be at once perceptible, will be instantly recognized, and will start him on an immediate tour of investigation.

"Talk about snaps," said the man on the \$11.08 bicycle. And just then it snapped.