

value in proportion to size and weight. These vessels usually run on regular schedules; they are faster than bulk carriers and a few carry passengers. Rates charged for package freight are under the control of the Board of Transport Commissioners.

Most of the traffic through the St. Lawrence canals from the Great Lakes to points on the lower St. Lawrence is carried in canallers, special vessels whose dimensions are limited by Lock 17 in the Cornwall canal (*see p. 823*). Of the 189 Canadian canallers at present operating, 17 are package freighters, 37 are tankers and 135 are bulk dry cargo carriers. These bulk ships which have a deadweight capacity of between 2,350 and 3,000 tons carry chiefly grain and also other bulk cargoes such as iron ore and coal, sulphur, pulpwood, etc.

In postwar years direct trade between the Great Lakes and overseas countries has shown a steady increase. In 1954 eleven steamship lines operated regular ocean services to and from the Great Lakes, carrying nearly 800,000 tons of freight. In 1955 this trade showed a further increase, with 17 shipping lines operating regular ocean services on the route. Part of this increase may be accounted for by experimental voyages in anticipation of the opening of the Seaway. It is expected that after completion of the Seaway the direct overseas traffic will increase both in volume and in value. At present most of the freight consists of manufactured goods such as iron and steel products, cars, electrical goods, glass, chemicals, clay and earthenware products, etc. In 1954 six cargoes of grain were carried directly to overseas ports.

PORT FACILITIES

Efficient and economical water transportation depends to a large degree on port and harbour facilities, such as docks, wharves, grain elevators, warehouses, loading and unloading equipment, railway connections, drydock accommodations, etc. Present port facilities in the Great Lakes are, on the whole, adequate for the current volume of traffic. Port Arthur and Fort William, twin ports at the head of the Lakes, have a combined total capacity of over 90,000,000 bu. in their grain elevators. Upon completion of the Seaway and the arrival of ocean-going ships at the Lakehead, new loading and unloading facilities may be required.

At Windsor the main docks are owned by private operators and any increase in traffic will probably necessitate additional construction. At Hamilton also the companies engaged in the handling of bulk commodities like coal, steel and iron ore have their own docks and loading and unloading equipment. The Hamilton Harbour Commission plans considerable expenditure on further developments such as the construction of docks and grain elevators, to handle the increased traffic expected after the completion of the Seaway. In Toronto the capacity of the grain elevators is about 4,000,000 bu. and a new warehouse has recently been constructed. Other Great Lakes and river ports where there are grain elevators of considerable capacities include Midland, Collingwood, Port McNicoll, Goderich, Sarnia, Port Colborne, Kingston and Prescott.

In the lower St. Lawrence the most important port is Montreal, where there are excellent facilities for the handling of general cargo. At the present time however there are no facilities for unloading grain from large Lakers which cannot get through the present canals; this situation is being remedied. In addition the loading and unloading facilities of various grain elevators will need further improvement. As at Dec. 31, 1953 the total capacity of grain elevators at Montreal was nearly 16,000,000 bu. Farther down the River Sorel has a modern 3,000,000 bu. grain elevator and Three Rivers has a 5,000,000 bu. elevator but improvements may be required in grain storage and transfer facilities. The Port of Quebec has a grain elevator capacity of 4,000,000 bu. but its facilities for handling general cargo may need improvement. If, after completion of the Seaway, large Lakers were to move as far east as Quebec City, appropriate elevator facilities for unloading such vessels would have to be installed and loading facilities for ocean-going ships increased. At Contrecoeur, a dock has been constructed for transshipping approximately 2,000,000 tons of iron ore a year from Seven Islands to westbound canallers. There are at the present time no facilities at Seven Islands for storing grain and discharging it into ocean-going ships.