the smaller contractors, who had not looked ahead and did not provide for filling their September and October contracts, are wild at being unable to get pipes, plates, etc., unless at a serious advance. One man loses \$250 on a job, instead of making that much; another, a plumber in a western city, will lose \$1,200 on a hotel contract.

Business is brisk, the metal and hardware dealers find, in both heavy and shelf goods, especially the former, such as plates and machinery steel, and travelling salesmen are getting good orders. But the general and persistent advance excites amusing comment from country buyers, and elicits some puzzled or angry let-Our Montreal correspondent tells of one man, who demanded, with indignation, to know why he was now being charged five cents the pound for crowbars, whereas he used to pay only two and a half. cumstance which bothers tradesmen in the metal work, as indeed it does contractors for structural material, both here and in the States, is that while they can get three-fourths of their goods supplied in reasonable time they are simply unable to get the other fourth without waiting for months, so busy are the foreign producers. Thus the whole of an important work may be delayed. Canadian boiler works, engine works, foundries and metal or hardware producers generally are as busy as they care to be. Some of them are compelled to refuse orders absolutely.

## LAKE FREIGHTS AND LAKE STEAMERS.

A great work, that of the United States Government, deepening the channels and harbors of the Great Lakes and their connecting rivers. Begun long ago, when in places there was but 10 or 12 feet of water, it went on till 15 feet depth could be reckoned on, almost everywhere But the growth of the marine Chicago and Buffalo. traffic, owing to the iron ore development of northern Michigan and Minnesota, and the great wheat production of the Northwest, brought larger boats, and a demand from their owners for greater depth of water to enable larger cargoes to be carried. A 20-foot channel from Chicago or Duluth to Buffalo was the cry, and that, we are told, has been achieved. But some of the vessel men doubt it-for instance the captain of the steamer "S. F. B. Morse," one of the Bessemer line of steel boats from Lake Superior.

"I was sitting on the dock one day last month," said an Amherstburg man, when the "Morse" was passing down, and I heard the angry captain hail, through his megaphone, an official on the river bank something like this:

"Say! how much water you got here?" (Detroit river, near the mouth).

"Twenty feet of course; don't the Government say so?"
"Oh! D—n the Government; how much water you

got?"

"Well, this drouth has lowered her four or six inches, but we have 19, I reckon."

"Not by a blamed sight you hain't; I touched just above here, and I'm only drawing 18 feet 6."

"What you got aboard that Standard Oil tub to put you so deep in the water?"

Got! — I've got 8.350 tons of ore, and wish't I had more, with these freights."

The steel steamer so irreverently called a tub is 475 feet in length and of 50 feet beam. There are dozens of steel boats now exceeding 400 feet in length, up here.

These high freights of 1899 gladden the hearts of vessel owners and officers. Five cents the bushel is being paid from Duluth to Buffalo on grain, and numerous charters have been made at 3½ to 3½ cents from Chicago, whereas prices of carriage were down to half these figures in previous seasons. Then the ore traffic, which has so enormously grown, yields good

prefit to steamers and barges this year. Instead of 55 or 65 cents per ton for carrying iron ore from Lake Superior to Cleveland, as in 1896 to 1898, they are getting \$1.40 per ton. The result is an extraordinary activity among the lake marine.

"You see some difference here in the size of craft since your early days," said my companion, who was an Old Timer. And the acknowledgment had to be made. The freight rates, too, were different. "I remember," he went on, "coming down from Chicago in 1860 with a load of 18,000 bushels of wheat at 20 cents the bushel to Buffalo. And mind you, 18,000 was a fair-to-middling cargo in them days." This must have been an exceptional rate, late in the fall, for the average rate on wheat during the years of the Civil War was 10½ cents. But development went on until by 1870 vessels were built to carry 50,000 of 70,000 bushels, and to-day there are steel steamers which carry 150,000 and even 200,000 bushels at one trip.

I was told in Detroit that four times more iron ore front Lake Superior was carried past Detroit in 1897 than the whole traffic of that lake amounted to in 1893. And when the enormous American demand of the present year for iron is remembered the production and transport of 1899 will doubtless be 2 phenomenal one. Looking up the Blue Book of American shipping to confirm the figures given above I found the statistics of great interest. This is not the place to quote largely from them, but one fact may be noted. According to the Chicago Board of Trade reports, lake vessels have carried, during the navigable season, May to November, inclusive, an average of 58 per cent. of all freight moved eastward from Chicago during the period 1892 to 1898. In the last mentioned year the total freight taken east was 6,300,870 tons. Of this quantity 39.4 per cent. was carried by rail, and 60.6 per cent. by water. Rising prices have given great impetus to business in every directionbut nowhere is it more visible than in the freight-carrying trade of the Great Lakes. J. H.

Detroit, 5th September, 1899.

## DETROIT RIVER.

At the Grand Trunk slip in Windsor waiting for the train on Tuesday, I watched two locomotives pull a part of a freight train out of a sort of hole in the wharf, the rest of the train, disconnected, being still on board the huge railway ferry. "Lansdowne." My travelling companion, who was a well known member of parliament and a walking cyclopedia of information about matters and men from Windsor up to Chatham, introduced me to a quiet-looking man, who explained the accident. Then he got to talking about railway ferries-he was an engineer—and told us about the first big iron railway ferry, the "Great Western" which was designed on the Clydesent across the Atlantic in sections, and put together at Windsof in 1866, the engines and boilers being built in Toronto, "Her appearance, Sir, put out of employment 1200 men on the American and Canadian sides of the river," said the man, and when asked how, went on to explain that up to that time the railway trains used to break bulk at Detroit and Windsor respectively, and their contents were taken across the river piecemeal. This big iron boat, however, carried the loaded cars across, ten or a dozen at a time, and so threw out of employment freight handlers, carters, and horses, lorries and their drivers. He gave some figures about the tonnage carried by the many large boats of this class now in use by the M.C.R., G.T.R., and C.P.R., but they might be tedious if set down here. To me the wonder was that collisions were so rare, with these nuge train-laden argosies, moving slowly as they must, running the gauntlet day and night of all the vast traffic of this wonderful strait, with a current at this point of from two to three miles an hour.

"There was a collision the other night," said the engineer. "down here a mile or so. The 'Lansdowne' was coming out of the Detroit slip with her load of some twenty cars, and a big propeller, loaded with 3,000 tons of coal from Cleveland for Duluth, ran into her. Both sank—the propeller in the stream the 'Lansdowne' quietly in her Windsor slip, just after they had managed to get her across and the cars off her. She was raised at a cost of \$12,000 and is here at the wharf now, in commission. The coal carrier is still in dry dock."

Our attention was attracted by an altercation between vessel