affairs exists, and some of the best "cod" sold in London are really sea-cat, frog-fish, and other delicious but despised species. Recently a Newcastle firm was fined for selling as "sardines" the small sprat. The Judge declared that "sardine" is a French name for the young pilehard, and the Norwegian "sardines" were really brisling, retailed as "kipper sardine," "Norwegian sardine," &c. The term "sardine," however, has been applied to a great variety of preserved immature members of the herring family. The immense sardine business in the State of Maine has never in all its history put up a single sardine, the raw material consisting of small herring.

Inasmuch as the names in use for important food fishes in various countries are so contradictory it is hopeless to look for any uniformity or reliability; and the main point for the public is as to the palatable and nutritious character of the fish. This is important for New Zealand fish, as groper, schnapper, and other species in various preserved forms if sent to some of the markets would certainly find no sale under their proper names. Just as the dogfish of the North Atlantic has been tinned under the name of "ocean whitefish," so it is justifiable to adopt more acceptable names for fish which it is

desired to introduce to new markets abroad.

## FISH-TRANSPORTATION.

Reference has already been made to the necessity of better transportation facilities in order that the public may obtain ample supplies in the best possible condition, and the fishermen receive proper returns for their catches. As an Irish authority expresses it, "The effective transporting of fish from the ports and their quick conveyance from the water to the table would revolutionize the whole fish business." Fishermen ought to be able to rely on their catches being delivered in perfect condition. The first preliminary is of course the handling of the fish on the boats by the fishermen and their proper delivery at the landing-wharves. Great carelessness is often seen on board the fishing-boats, and if a fish is bruised and in bad condition when brought ashore no quick transportation or efficient methods of shipping can make a bad fish into a good one. Indeed, it would be to the great advantage of the fishermen themselves and the merchants if all fish were placed in boxes and handled carefully, as they are in other countries; the use of ice might also be encouraged, so that fish at all times might have a little ice upon them and be kept cool. It is too much to expect that the fish could be wrapped in paper, although with salmon and trout this would be worth while, as even cod and sea-fish keep their qualities far longer if individually wrapped in paper on board the fishing-boats. In Norway this has been done to a large extent. The use of fish-boxes, however, would improve matters very much.

Three things are necessary to improve the transportation of fish: First, refrigerator cars, which should be attached to quick trains; second, rapid unloading and distribution of fish which have been shipped; and, third, low rates. In Ireland some years ago arrangements were made to have a refrigerator car attached to every train leaving such ports as Ardglass, Howth, Kinsale, &c.; and it would be just as easy in New Zealand to carry out a system of transportation by quick trains in refrigerator cars. In the same way, the steamers carrying fish should be required by the strictest regulations to handle shipments of fish expeditiously and carefully. There has been considerable pressure brought to bear by the exporters of dairy-produce to get low rates for shipping long distances and to improve the methods of handling all kinds of farm-produce, frozen meat, &c.; and at a conference of farmers held recently complaints were strongly expressed of the damage done through obsolete methods employed at New Zealand ports, and the Harbour Boards were urged to remedy the state of affairs as soon as possible. If farmers complain, how much stronger ground is there for fishermen and fish merchants to be dissatisfied with the rough and obsolete methods of handling such delicate food products as fish! Better train facilities from such places as the Bluff to Christchurch, and from various ports to Wellington, might with very little difficulty be afforded. The earliest trains, it might be arranged, should take fish along with them, and collect the shipments at various points, so that the fish should reach the large centres of population without delay. Even after arrival at the terminus fish are often handled in the most absurd manner, especially shipments brought by steamer. These shipments, after arriving at the wharves, may be delayed for many hours, exposed to the sun and to the worst weather-conditions, before they are allowed to be taken ashore or to the fish-markets. came to my notice of fish arriving before daylight which were not removed until 8 o'clock in the morning, and remained for hours exposed to heat and weather-conditions, flies, &c., so that they presented a very undesirable appearance and were in bad condition when the shipments were actually carried Respecting the rates for carrying fish: Many complaints were brought to my notice, and it appears that there is not a strict uniformity as to the rates charged for packages of fish, a statement being published in the newspapers recently that 2s. was charged for carrying 18 lb. of fish a distance of thirty-two miles. In Canada the Government has made arrangements with the express companies that a rebate shall be paid upon all shipments\* of fish sent by quick express, and the result has been that the fish business has advanced by leaps and bounds, and many towns which had difficulty in securing supplies are now well provided with fish in exceedingly good condition.

## LABOUR DIFFICULTY IN FISH INDUSTRY.

I have been frequently met by a serious objection when urging that new modes of preserving fish and manufacturing fish products should be initiated in New Zealand, and that is the high cost and great scarcity of labour. The preparation of such products involves labour, and I realize that some difficulty actually exists with regard to that. But I know from my thorough acquaintance with the British Columbian fishing industries and with the commercial utilization of fish products in eastern Canada (Nova Scotia, &c.) that the labour difficulty is great in Canada. Labour is not abundant, and is highly paid. By the adoption of mechanical appliances and modern machinery, however, these difficulties

<sup>\*</sup> The cost to shippers or consignees has been reduced to one-third the usual rate.