

DANISH BUTTER IN ENGLAND.

In the *Fortnightly Review* an English lady, Mrs. Tweedie, asks her fellow countrymen why they do not make their own butter, instead of buying it in Denmark. Her question may well be changed slightly to adapt it to ourselves, and we may ask why is it, with all of our facilities for the production of butter, that England spends about \$65,000,000 a year for foreign butter, and the value of the butter we sent to England and Scotland was only \$675,762 in 1893 and \$941,523 in 1894? Danish butter is not imported into England because it is cheap, but because it is good; it ranks with or above the best English butter. That Denmark is nearer to England than we are is no explanation of our exclusion from this trade, because the most mortifying part of Mrs. Tweedie's article, for us, is her statement that the competition which Denmark has begun to suffer from lately is that of Australia, whose butter has to cross the tropics, and is carried through the Red Sea in refrigerating chambers in order to reach England in marketable condition. Enough Australian butter is going into England to affect the price of Danish butter. Yet we, only a week from England, have not sent her much more than a million and a half dollars' worth of butter in the past two years, and our farmers are complaining that there is not a sufficient market for their products.

The Danish butter does not make itself. No manufacturing industry is carried on with a nicer regard for quality and thoroughness. The company whose work Mrs. Tweedie describes, and which she says is a fair sample of all the butter making companies in the little kingdom, maintains veterinary surgeons who inspect every two weeks the herds whose milk is bought. If disease breaks out between these visits, the farmer has no motive for concealing it, because the company will pay him for his milk just as usual, but it will throw the milk away. Any farm hand who has been exposed to a contagious disease loses nothing by reporting the fact and keeping away from his work, for his wages go on just the same. Every farmer keeps a quantity of ice, and the milk is promptly cooled. He strains the milk with a care that very few American farmers can be induced to exercise, but the milk is scientifically filtered when it reaches the factory. Every can of milk is tasted at the factory by an expert, who sets aside every can that is suspicious for chemical examination. The milk is cooled with ice till it reaches 40 degrees, and stands till the cream is risen, when the cream is skimmed by hand. Mrs. Tweedie speaks of some of the farmers having separators and delivering to the factory only the cream, but she gives the impression that at the factory there is only hand skimming. The cream is raised to a temperature of 63 to sour it, and then cooled to 50 for churning. Mrs. Tweedie gives the details of the working and packing, and draws a fascinating picture of the butter factory and the women and girls who do the work in it. The prices of milk she mentions are low compared with the prices paid by people in our cities for their quart a day, but they are not low compared with what farmers in the vicinity of our great cities generally net for their milk, and the butter brings a high price in England.

In a recent address ex-Governor Hoard, of Wisconsin, one of the leading dairymen of his State, said that the price of Wisconsin butter had been raised in a few years from 15 to 25 cents a pound by improving the herds and the processes of butter making. This corroborates the experience of Denmark that it pays to make a good thing.

The trouble with the American farmer on a general average is that in the past he was too prosperous; it was too easy to make a living to make it worth while to take much pains about anything. There is no reason why he should not make as good butter as there is in Denmark and Australia, and as compared with the latter he certainly has an enormous advantage in being so much nearer England and on the same side of the equator. If he raises sheep he ought to pack his fleeces as well as the Australians do, instead of ruining his market by trying to see how much dirt and how much of the inferior portions of the fleece he can work off on to the Eastern buyer without detection. If he raises cotton he ought to see to it that his cotton reaches market in as good shape as the cotton of Asia and Africa. The English people eat great quantities of bacon, but they do not like our bacon so well as they do that cured in

Denmark and some other parts of Europe. Our packers, however, are making more effort to teach the English to like our bacon than they are to cure bacon to suit the English taste. Here and there is an exception, but as a whole we are not half trying to find a market for our productions. We have an idea that England must buy our wheat and cotton! and it is useless to bother about anything else.—*N. Y. Journal of Commerce and Com. Bulletin.*

FISH OF ATLANTIC STATES.

This work of the United States fish commission is a very elaborate document, perfect of its kind, representing an astonishing amount of labor, and for accuracy is cited abroad as a most creditable performance.

The group of States treated in this report are New York, New Jersey, Pennsylvania, Delaware, Maryland, including the District of Columbia, and Virginia. That group takes in a big area, some 159,700 square miles. The area of water is 7,635 square miles. It has altogether, when you follow water frontage, taking in indentations of bays and sides of rivers, a coast line of 5,400 miles. In 1890 these States contained a population of 15,798,055, and to-day there are certainly over 16,000,000 of people. Of these 16,000,000 you might say that one-half might, if they wished, engage in fishing as a business. But how many are there who catch fish, take oysters, or who find their living by working on the water? The answer is, about 91,000. Maryland has the most, 40,000; Virginia the next, 24,000 (the approximate figures); New York, 12,246, and Pennsylvania and New Jersey about the same number, 2,275.

Beginning with an albacore and ending with a yellow-tail, there are seventy kinds of fish, all of recognized food value, which are to be caught at various times and seasons along our neighboring coasts or in our rivers and lakes. While there are so many to pick and choose from, the shad and the oysters are most valuable, and bring in more money than all the remainder of the fish of the section.

Looking in a general way to catches, taking only pounds, the menhaden would figure first as to total weight, the bluefish coming next. The catch of menhaden in New York and New Jersey waters amounted in weight to 125,530,650 pounds, the bluefish to about 13,000,000 pounds. Shad would be represented in the two States as a catch of 13,269,411 pounds. While the menhaden were worth \$352,579, the value of the shad was \$604,647. Now it will be understood how important is the shad fishery, and why Fish Commissioners pay most attention to the propagation of shad and their introduction into our rivers. Taking all together, the shad represents to the fishermen a value of \$1,216,000 in the Middle States, but it is in oysters where there is the largest return, and this alone has an estimated value of \$12,400,000. Taking New York alone, her oysters were worth in 1891, \$2,748,509.

Maryland has more persons employed in the fisheries, with a larger capital invested, and turning out a bigger value in products, than any other of the Middle Atlantic States. She enjoys the most favorable physical conditions. She has a water frontage of 2,170 miles, for Chesapeake Bay is the largest inland body of salt water on the coast of the United States. All the best features are to be found, for migratory fish, crabs, terrapins, and, above all, for oysters. As to her oyster fishery, it represents 81 per cent. of the value of the fishery products. The State has invested a capital of \$7,649,904 in fisheries, and her product is valued at \$6,019,165. In 1891 the oyster output alone was worth \$5,295,866, and after oysters came crabs, worth \$303,716. It might have been supposed that the terrapins would have been worth more than \$22,333, but there are many terrapins in the northern market, so-called Maryland diamond backs, coming from very much further south. It is, then, the oyster business which is so important.

Virginia makes a fair showing. She has, too, many physical advantages. A portion of Chesapeake Bay is hers, with large sounds and fine rivers. As in Maryland, it is the Virginia oyster business which overshadows all her other water products, and in this respect she stands second to Maryland. With Maryland she has the greatest number of vessels engaged in oystering and hands employed in the packing of oysters. Her total production in 1891 was \$3,647,845, and of this oysters represented \$2,524,344. Norfolk has the largest capital invested in the general fishing business.

As far as has been ascertained, according to the latest compilations, the total take of fish, oysters, everything available for food or to be used for making oil or as fertilizers, represents a grand total weighing 590,454,369 pounds, and worth \$19,023,474. The proportion of capital invested to the returns makes an excellent showing. The money put into vessels, wages, cost of apparatus, is close to the earnings, which shows that the entire amount in stock comes back to the investors once on an average in the year.

It may be useful to know by those studying alimentation, that in a bushel of oysters there are seven pounds of meat, eight pounds in a bushel of round clams, ten pounds in long clams and mussels, and four and a half pounds in the eye or heart of a scallop, which eye or heart in a scallop is neither one nor the other, but a sweetish muscular tissue. A common crab will weigh in meat one third of a pound, and for manurial purposes the horseshoe crab is rated at two pounds.

Under any circumstances, save abnormal ones, the production of fish in any ten years, taken as a whole, appears to be the same as for any other ten years. If there may be scarcity of cod this year off New York Bay, there may be more cod off Nantucket. The average catch is then the same—that is, for nomadic fish. For anadromous fish, this will by no means hold good. The shad go down the river where they were born or introduced. When old enough, they launch boldly to the sea, to return when the time of reproduction approaches. Salmon do the same thing, as these anadromous fish must ascend the rivers.

It is then perfectly possible for man, with his many engines of capture, to catch any shad or salmon descending a stream, or he might block them by the building of dams. Then, in time, there would be no shad or salmon. Of course oysters, being fixed to their beds, might all be dredged, or their spawning capacities hindered.

There are not less cod caught on the banks than at the time of Sebastian Cabot, but certainly more. In the sixteenth century, only one race or so, with a few badly equipped boats, caught cod. Now all the world engages in cod fishing. The chance of there coming about an exhaustion of the nomadic fish is remote. The United States may be said to be far in its infancy, as far as relates to the fish products of the Pacific coast.—*N. Y. Times.*

GOLD YIELD FOR 1894.

The estimates of gold production given out by President Valentine, of the Wells-Fargo Express Company, for 1894, turn out, as director of the mint Preston maintained, to have been too large. Mr. Valentine included the yield from British Columbia with the mines of the United States and "lumped the whole lot" at \$42,000,000. The bureau of the mint has been making a careful inquiry into the matter, and finds that the production of our mines probably did not exceed \$40,000,000. More gold has been handled by the refineries, but it seems that \$2,700,000 came from Mexico, and that only \$700,000 had been returned among the imports. Mexico lays an export duty on her gold, and it was to the interest of the producer to smuggle it across the border, since he would be paid the same price by American refineries.

The revised figures make no difference in the world's yield of gold, which is still placed at \$170,000,000 for 1894. Gains in Africa and elsewhere made up for the \$2,000,000 reduction in the United States. The increase from our mines over 1893 is 11 per cent., as they produced \$35,955,000 that year. The nature of the miscalculation that will be most unwelcome is that some of the mining states that have been crowing so loudly will have to revise their claims.

This year promises a gold crop of \$180,000,000 for the world. The South African mines continue to be developed and to make rich yields. Old mines in this country are being reopened and worked with profit with new methods, and fresh "prospects" are being continually discovered.

—Mr. Edmond Dupre has been elected president of the Levis Board of Trade.

—A judge of Milesian extraction charged the jury as follows: "Gentlemen of the jury, you must find that the defendant is guilty beyond a reasonable doubt. A reasonable doubt is such a doubt as will convince a reasonable man that the defendant is not guilty."