

CANNED GOODS AS A COMMERCIAL FACTOR

Consumers' Desire for the Packeted, Bottled and Tinned Article Has Built Up a Big Business

A few years ago, we were able to buy horse raddish by the root. The maid peeled it, chopped it, added the vinegar, and served it with the beef. To-day, we buy horse raddish already prepared, attractively bottled and labelled. We pay the extra cost of this prepared article. It has a direct effect on the cost of living. At the same time, the bottled, canned and packeted article has grown to be a big factor in commerce. The first Canadian canning factory was started at Grimsby, Ontario, by Mr. W. W. Kitchen, in 1868, although some canning of salmon had been done at St. John, N.B., in 1840, but without a factory being built. To-day there are 125 million cans produced annually, or as one man has figured, enough to make a ribbon of cans from Toronto to New York, down to and across the Panama Canal, up to Vancouver and back to Toronto again. Canned goods especially have made a surprisingly rapid pace in trade spheres. Last year, \$20,000,000 worth were exported from the United States. Canada exported in that year \$6,934,000 worth of canned goods, importing also \$4,124,000 worth. Canned and preserved goods, the basis of a big industry, come to Canada from all parts of the world. For instance, we get anchovies, sardines, sprats and other fish packed in oil from the United Kingdom, Hong Kong, China, Germany, Italy, France, Japan, Norway, Spain, Belgium, Portugal and the United States. The largest share of prepared or preserved oysters consumed in the Dominion comes from the United States, although Hong Kong supplied 13,748 pounds of them last year.

Both Buyer and Seller.

This country is both an importer and exporter of prepared and preserved fish of various kinds. During the fiscal year ended March, 1913, we bought \$178,495 worth of prepared fish, \$8,000 worth preserved in oil, \$79,000 worth of canned salmon and \$43,000 worth of other preserved fish from countries all over the world, and as far apart as Japan and Russia, China and the British West Indies. At the same time, we shipped to points in every part of the globe 23,000,000 pounds of canned salmon with a value of \$3,484,000. It is interesting to see to what countries Canadian canned salmon has found its way. The largest buyer is the United Kingdom, which purchased 16,000,000 pounds, valued at \$2,605,000. Other large buyers were Australia, the Straits Settlement, New Zealand, France and Fiji. Smaller purchasers were the West Indies, South Africa, Hong Kong, Newfoundland, Belgium, China, Ecuador, Dutch East Indies, Japan, Mexico, the Philippines and many European countries. The Dominion is also a large exporter of canned lobsters, the value of these exports last year being more than \$3,000,000. Other canned exports were meats, milk and cream, vegetables and fruits. Comparatively few canned fruits are exported, the value last year being \$220,000. On the other hand we imported fruits in air-tight cans or packages weighing 13,000,000 pounds with a value of \$823,000. These came from many countries, although the United States supplied us with more than half.

Ginger From China.

Preserved ginger we got from six countries, China being the chief source of supply. We imported also jellies, jams and mincemeat, canned meats, canned poultry and game, fluid beef, canned soups, condensed milk, vegetables, chief of which were canned tomatoes and canned corn. The United States is probably one of the largest exporters of canned goods.

Canned meats exported by the United States amounted last year to about \$3,000,000, pork and beef being about \$500,000 each in the eleven months ending with November, 1913, while "other canned meats" amounted to \$1,250,000 in the same period. Canned beef shows a marked falling off in exportations, having been about one-half as much in 1913 as in 1912, and little more than one-third as much as in 1911. Canned pork also shows a slight decrease when compared with 1912. The canned meats go largely to the tropics, as do also the condensed milk, of which the exports of the United States in the eleven months ended with November, 1913, amounted to \$1,150,000.

Considering the large trade done in canned goods, little trouble is experienced in the way of impure canned food. For instance, Dr. McGill, the chief analyst at Ottawa, reported on

140 samples of canned tomatoes purchased in various parts of Canada. With a single exception, in which slight decomposition was found, the contents of the cans were in good condition. In the case of 146 samples of canned corn, they were all found to be in an excellent condition of preservation. Regarding the soundness of the contents of 148 samples of canned soup, 137 were found to be good and 11 slightly unsound. In one, however, had decomposition proceeded far enough to be regarded as spoilt or made dangerous in use.

Canned soup seems to offer a fertile field of analysis. Complaints were received at Ottawa regarding the corrosion of the can, discoloration, and the substitution of other material than that designated on the label, in particular to the substitution of other flesh than chicken in so-called chicken soup. Of 148 samples, 7 cans were found to be distinctly corroded, three slightly corroded, 14 in fair condition, and 124 in good condition. Corrosion of the can proceeds in the first place from imperfect tinning, but is naturally intensified by the acidity of the contents. In most cases the contents are faintly acid, but generally in so slight a degree as to make quantitative expression of the acidity difficult and unnecessary. In 8 samples, the acidity was sufficiently marked to permit of exact determination. Marked corrosion was noted in only one of these 8 samples, and slight corrosion in another. It is evident, however, that as corrosion due to acidity proceeds, the acid is neutralized, and a fairly high acidity in the fresh soup, may be compatible with strict neutrality in the same sample, after long keeping. In this case, iron goes into solution, (with possible traces of tin or lead). The discoloration complained of is usually due to solution of iron, which, however, can have no poisonous effects. Lead was not found in any sample; but traces of tin were noted in 4 samples. The amount was too small to have any physiological significance.

Catching the Substitutes.

Canada's chief analyst, Dr. McGill, some years ago made an attempt to distinguish between chicken flesh and veal or other substitutes in soups. The results of his examination were unsatisfactory and he proposes to do further work in the matter.

In the case of tomatoes, the consumer of canned goods gets a wide variety of weight for his money. Of 111 samples of canned tomatoes taken in Canada, the average capacity of the can is 37 ounces. The average total contents is 34 ounces, the difference of 3 ounces being vacuous or containing air. Of the total contents of 34 ounces, there was an average of 18 ounces solid contents and 16 water. The solid matter of these contents is the true measure of the value of the article, equal quality being assumed. While the average amount of solids is 18 ounces this varies between very wide limits, namely, from 11.2 ounces to 24.3 ounces; which means that some samples have fully twice the value of others. There is no doubt that some regulation is necessary here. The solids referred to are not the dry solid matter of the tomato, but, the moist solids retained on cheese cloth. The weighed total content of the can is poured upon cheese cloth and allowed to drain as long as drops fall at intervals not longer than 5 seconds. The water which passes through is then weighed, and this weight subtracted from the weight of total contents. The remainder in the weight of the solid matter. The State of Ohio requires that standard tomatoes should be packed to have a gross weight of 36 ounces of fruit, exclusive of juice.

Eating Other Things.

In buying canned corn, the consumer is apparently getting more of what he pays for. There is great uniformity in the weight as well as in the character of the contents of the cans of corn. This leads to the inference that the work of preparing canned corn is carefully and systematically conducted. Frequently the consumer also gets in his canned corn, acid sulphite of lime, probably added for bleaching effect, and the use of a non-sugar sweetener, usually saccharine. While sulphurous acid is a poison, it has not been demonstrated that it is dangerous to the human system in the minute quantity present in our canned corn. Dr. McGill does not think that the small amount of saccharine in canned corn is dangerous to the health of the consumer. The manufacturer using saccharine in food products, however, should announce the fact. We want to know exactly what we eat.

The real estate market may be described as a little quieter than the minister of militia.