

family of Hebert some three hundred years ago. The habitants throughout these many years, and the settlers in many other parts, scutched out, heckled and spun as well as wove their yarns into linens, and some of the linen is to be found in the homes of these people to this day.

Flax, therefore, it is proven has been grown and manufactured in this country ever since the country was first settled. Before the invention of the cotton-gin cheapened the production of cotton fabric, flax spinning and weaving was a common household industry. The older generation of the present day can remember the spinning wheel and distaff wound with flax in the corner of the country kitchen.

The importance of the industry was early recognized and in the United States was carefully fostered by legislation. As early as the year 1640 the Massachusetts General Assembly passed an Act to encourage the production of flax, which was followed by similar action by other states, including Pennsylvania, Maryland and Virginia. In the year 1719 a large immigration of Scotch-Irish from Londonderry improved colonial knowledge of the cultivation and manufacture of flax. Encouragement was given to its manufacture in a household way, and in the year 1791 it is recorded that in the two states, Massachusetts and Rhode Island, 25,265 yards of linen were manufactured in the homes, and that in the year 1810 the production in families throughout the United States was 21,211,262 yards, the flax being mostly grown by the families who made the linen. Experience, however, later showed the invention of the cotton-gin and the consequent cheapening of cotton cloth, to a large extent destroyed this household industry in the United States as well as in the Dominion, but by no means killed the linen industry. For certain purposes linen is indispensable. In strength, beauty, and durability it so far surpasses cotton that it maintains its place in spite of all competition. It is significant that at the time of the civil war in the United States the production of flax was less than five million pounds. To be accurate, in the year 1860 records show the production of fibre to have been 4,720,145 pounds, and ten years later this had jumped to 27,133,034 pounds. By 1880, the production had shrunk to 1,565,546 pounds. In 1870 thirty-two states of the Union were producing flax fibre, so that it was shown the soil and climatic conditions were favourable in many parts, though the statistics also showed that 26,484,319 of the

[Mr. Glass.]

amount was produced in nine states—Illinois, Iowa, Kentucky, Michigan, New York, New Jersey, Ohio, Pennsylvania and Wisconsin. Of this amount Ohio produced 17,880,624 pounds. But the real reason why, on this continent, flax has not occupied that foremost position amongst the fibre and weaving industries that it formerly held is due primarily to the disadvantage under which we are in this country with regard to labour. We are in competition with the cheap labour of Russia, Belgium and other countries.

Flax, although grown in a rotation, and although grown like any other field crop, is rather complex and difficult to handle and the labour cost of production is very much greater than that of any other crop. Flax has to go through various processes in order to produce a marketable article in the shape of fibre. The people on this continent have not given serious consideration to the proper tilling and preparation of the soil necessary to produce the best results. Very frequently it has been considered that an old pasture which has to a certain extent played out is a suitable field on which to grow a crop of flax. Besides, where it has been grown that serious attention has not been paid to fertilization which is given to other crops, and consequently the yields have been disappointing. It has been reported that in the West, where flax is largely grown for seed, the yield per acre runs from a ton to a ton and a half. On the other hand it is quite a common thing in Belgium, France and Germany to produce a crop of three and a half tons, and even as high as four tons per acre. I think, however, that a fair average crop in those countries where flax has been successfully grown is about three tons to the acre.

In this country the method of encouraging the culture of flax has been something along this line: Certain groups of men, who have established flax mills, say to the farmer, "We want you to grow so many acres of flax each year; we will give you the seed free, you plough the land, put the seed in and deliver the crop; we will provide all the necessary labour, after furnishing the seed to you." After the flax is grown the process has been to pull it by hand, but that is only possible profitably where you have cheap labour. In western Ontario we have used a great many Indians. Sometimes boys and young girls have been able to earn a little money in this calling; but whereas in days gone by a field of flax could be pulled at a cost of