

to produce straw for its fibre. But in the West they have largely been content to produce flax for seed purposes only, and that has proved a very profitable business. We make the fibre, and we are shipping nearly all the fibre we produce to the mills of New Jersey and Massachusetts. There it is spun into yarns, and with those yarns they make coarse cloths. They spin it into twines and yarns for shoemakers threads and harnessmakers threads, and into twine for fish nets and gill nets. We have shipped some fibre to Ireland where it is spun into yarns and manufactured into cloth. The Belfast linen mills, the largest spinning mills in the world to-day, have men engaged in controlling some thousands of acres of land in Ontario where they are growing this flax for the purpose of their spinning mills in Ireland, because they cannot get the quantity they want there. They are growing fibre here, retting it here, and shipping it to Ireland. If the Irish mills, which control one-third of all the spindles of the world, can send their men out here to produce in Canada fibre for the raw material for their mills, why can not we establish spinning mills in our country and connect up our weaving industry? We produce the raw material, the fibre from which the yarns are spun. That fibre has to go out of this country to be spun into yarn, and then the yarns spun from it are brought back here to be woven into linen cloth. In Guelph we have the only linen weaving industry on the continent of America. We can produce the fibre and we can weave the cloth. Why should we allow ourselves to remain in the ridiculous position of not being able to spin the essential material for our weaving mills, which is the yarn spun from our fibre? I merely suggest how this should be done. In the past we have seen fit to grant bounties for the development of zinc and iron, and for other purposes. If a small bounty spread over a period of two or three years would result in the establishment of spinning mills in this country, it would be a good business policy to give encouragement in that way. At the present time we produce in this country enough raw material to keep five substantial spinning mills running. If our production this year increases in the ratio that is already promised, we shall almost double our capacity during the present year.

[Mr. Glass.]

During the last discussion of this question in the House, the hon. member for South Oxford (Mr. Sutherland), who spoke, drew attention to the objection farmers had that flax was injurious to the soil. In connection with this discussion, I desire to put on record the opinion of some men who are competent to upset any such opinion, and to deny any such charge as that. During the discussion of the subject of flax at a convention held in the city of London in the spring of 1916, amongst others who spoke there was a Mr. Leitch, a practical farmer, who had been growing flax for some years for the mills in that district. This is what Mr. Leitch says as to the effect of flax on soil:

I have grown flax for a number of years. After flax I always sow wheat and taking the wheat crop into consideration, it will pretty nearly pay for both crops. I have threshed 42 bushels of wheat to the acre after flax with straw five or six feet long. After yields like that we do not worry about flax being hard on the land. That year I grew $\frac{3}{4}$ tons per acre.

Professor Zavitz of the Experimental Farm writing in the Farmer's Advocate a short time ago, said:

The actual amount of fertilizing constituents taken from the soil by different crops is an important matter from the farmer's standpoint. To secure this information it is necessary to have a knowledge of both the yields and the chemical composition of the crops. Unfortunately, the statistics gleaned by both the Dominion and the Provincial Governments do not furnish sufficient data for these calculations. For instance, the Ontario Bureau of Industries has not collected information in regard to yields of seed and straw of flax or of straw of cereals. At the Agricultural College, however, accurate determinations are made from year to year of the yields of both grain and straw per acre of the different farm crops.

Flax, winter wheat, oats and barley have been grown under similar conditions in the experimental grounds at Guelph in each of the past twelve years. The varieties used for these determinations of the comparative exhaustiveness of soil fertility were Common flax, Dawson's Golden Chaff winter wheat, Banner oats and Mandscheuri barley. In each case the chaff was included with the straw. The flax was grown in duplicate plots each year with an average of 77 pounds of seed per acre, and the average returns, therefore, represent twenty-four tests in the twelve-year period.

For the chemical composition the figures used were obtained from the 1915 edition of "Feeds and Feeding" by Henry and Morrison with the exception of those of flax straw which are not given in that publication. For the chemical composition of the flax straw use has been made of the figures determined by Kennedy in his thesis prepared at the Ontario Agricultural College. The flax was obtained from the Field Husbandry Department, and it was analyzed in the Chemical Department of this