substances are laid to keep the flax submerged. Fermentation soon begins with the evolution of gases and the decay of the soft vegetable tissue sometimes proceeds quite rapidly. After a few days the fermentation subsides and usually in from ten to fourteen days the process is complete. The time required for this operation varies with the temperature, but when it is found that the fibre when handled separates readily from the softened woody tissue, the small bundles are removed from the water and spread evenly over a grassy mesdow. After being so exposed for about a fortnight advantage is taken of the first fine dry weather to gather up the flax, which is now ready for the next operation.

Various modifications of this process of retting have been proposed and put in practice, some involving the heating of the water, others the addition of various chemicals, all looking to the hastening of the process without injuring the material.

## SCUTCHING.

This is the process by which the fibre is freed from the woody material still adhering to it after retting, and thus rendering it fit for the market. Various machines have been devised for this purpose, driven either by water or by steam power. These scutching mills are made and run with the object of producing the largest proportion of long clean fibre with the smallest amount of waste.

In Bulletin II of the Census of 1906, covering the manufactures of Canada, the following particulars relating to the production of dressed flax in this country are

given :-

Number of establishments in which dressed flax is prepared 23 (22 of these are in Ontario).

| Value of land, buildings and plant | \$105,750 |
|------------------------------------|-----------|
| Working capital                    | 115,000   |
| Total wages paid                   |           |
| Value of product                   | 241,932   |

From these figures it will be seen that the production of dressed flax cannot be classed among the important industries in Canada.

## THE GROWING OF FLAX FOR SEED.

The growing of flax for its seed is a larger industry in this country. In the Census of Canada for 1900 the area under the cultivation of flax and the yields of seed in the several provinces are given for 1890 and 1900 as follows:—

|                      | 1890.  |   | 1900.                                 |   |
|----------------------|--|---|---------------------------------------|---|
| <u> </u>             | Number of acres.                                 | Number of bushels of seed.                                      | Number of acres.                      | Number of bushels of seed.                              |
| Prince Edward Island | 75<br>83<br>92<br>2,878<br>6,775<br>6,089<br>153 | 746<br>410<br>459<br>29,476<br>71,339<br>84,588<br>1,462<br>364 | 57<br>1,881<br>6,388<br>14,404<br>327 | 281<br>58<br>283<br>19,309<br>67,296<br>81,898<br>3,113 |
| Totals for Canada    | 16,236   | 138,844   | 23,086                                | 172,242   |