

"down sails." The sails are taken down and the anchor is hove out, the spring-line fastened.

One man begins to heave out a little bait; each one throws out his line, and all are waiting for the fish to come up. The bait-heaver always keeps the bait in sight. By-and-bye you feel a sharp snap on your line, and then you pull in quickly, when lo! you find a mackerel securely fastened to your hook.

When you get him over the gunwale you give a quick "slod" into the boat, at the same time sending your line out for another. After one has become practised at catching these fish one becomes very adept, and in four or five seconds from the time you feel the mackerel on your hook, you have him in the boat and the line out again. When the fish are biting pretty well, several hundred is an average catch, and I have seen this summer as many as a thousand caught at one time. The highest number I myself caught this summer at any one time was 500, three of us in the boat.

It is very exciting work, and very delightful when you are catching them fast, but it is kind of disagreeable to get out in the morning at two or three o'clock, for you must be on the fishing-grounds before the sun rises in order to raise them, for if the sun is shining bright in the early morning the very best of bait will not induce the mackerel to rise from the bottom. In the afternoon, however, as many may often be caught as in the early morning, but as a general thing when they bite well in the morning they will not bite at all in the afternoon, and *vice versa*, so that to make sure one must be over them both morning and evening.

Mackerel, probably, brings the highest price of any salted fish. For several years past the fisherman has seldom received less than fifteen dollars a barrel, and often, as this year, the price goes up to twenty dollars, and as about 160 fish fill a barrel it will be seen that each individual mackerel is worth, on an average, ten to fifteen cents, at first hand.

Hermanville, P.E.I.

J. A. MACDONALD.

The Conscience of Nature

To the Editor of FARMING:

"Whatsoever a man sows that shall he also reap," firs are not gathered from thistles any more than weeds spring from pure grain seed. Nature seeks to maintain a true balance, and when disturbance occurs, through either natural or foreign force, the reaction which follows destroys the harmony. If the feed given a domestic animal is so balanced as to provide the various natural wants correctly, the best result, probably a profitable one, is obtained. If, however, the rations of the animal are defective in either quantity or quality, the proper proportion of the constituents necessary to produce the best results are therefore not maintained, and the balance being disturbed a partial or total failure occurs, for we but reap the result of our sowing.

These results may be termed the conscience of, or finger post to, the invariable end that must follow. It is the principle underlying the cultivation of all crops. There may be various ways of doing anything, but to succeed they must all be governed by the same underlying principle. Land may be enriched and impoverished at the same time by raising certain varieties of crops, as for instance, the clover and peas, which through their roots and stubble store nitrogen from the atmosphere for the use of future crops of other species, but at the same time sap the strength of the land in removing the phosphoric acid and potash. Whether such crops are grown to advantage or not depends on the farmer's knowledge of the natural results which will follow his husbandry. The conscience of nature will assert itself and tell us whether we have pursued a right or wrong course in our work of the land.

Weeds serve as an excellent illustration of the conscience of nature. They may be properly looked upon as the result of unbalanced soil conditions, and, like the ills and

diseases of the animal body, can be traced to the constitution of the body that produces them. They act as the conscience in pointing out the true conditions existing, and we must consider our text very broadly to fully appreciate this. If we have so cultivated our land that we have destroyed the balance and caused it to fester with noxious weeds instead of nourishing our crops, we are but reaping the result of ignorance or careless sloth. A soil that is kept in the highest all-round or balanced fertility is not one that is subject to grow weeds. The grain produced is proportionate to the straw. But in an unbalanced soil the same amount of straw may be raised, yet a great deal less grain, and of a poorer quality. In such a case the farmer might say his land was too strong, because he raises so much straw, and that he would like to make it poorer in order to do well. That is just where the knowledge of correct principles in soil fertility is of value. Such a soil is evidently very rich in potash, which goes so much to the composition of straw. If grain is composed more largely of phosphates than of potash or nitrates, and the straw grows out of proportion to the grain yield, then we must apply phosphates in some reliable form to *gain the balance required* for the proper reproduction of seed. But how shall the average farmer know what his soil needs? Some tell him that a chemical analysis of his soil is needed, but a true record of his crops for ten or twenty years is the best soil analysis. The whole question of soil cultivation and fertility is a growingly important one. There do not seem to be in Canada to-day, especially in Ontario, a dozen men who can fully discuss such a subject on correct principles and in a readily practicable way. Yet the conscience of nature speaks out from year to year more loudly, as shown in the national statistics, which record a decreasing yield of grain proportionate to the straw produced, and that of a poorer quality.

Ontario at one time could raise wheat of a quality that did not need mixing with Manitoba brands. Although the climate is a drawback at certain times to raising good wheat in Manitoba, yet the *soil* produces the quality. Science to-day can do more for agriculture by pointing out the causes which produce good and ill effects than by devising methods of working detail and concocting nostrums to destroy the ever-recurring microbe, the weed; and until they adopt the broad course for which their learning and research should fit them they cannot command the attention and respect of the farmers, who can generally be depended upon to work out methods suited to their circumstances when they know what is wanted.

Bronte, Ont., Oct. 10th, 1899.

W. J. T.

Another Experience With a Blower Elevator

To the Editor of FARMING:

Although it is past the season for ensilage cutting my experience may be of benefit to others another season. I have filled my silo for the 13th year, but never with so much satisfaction as this year when I used a blower. Formerly I used several different makes of carrier elevating cutters but always with more or less trouble (sometimes very much of it.) This year I got one of Thom's blowers and was more than surprised at the ease with which the corn was thrown into the silos twenty-five feet high. The power used was a twelve-horse power threshing engine. On several occasions, when the fireman had gone into the silo and had forgotten to fire up, the steam ran down to twenty-five lbs. I was then feeding at the rate of about seven tons per hour and could notice no difference in the blower elevating the corn. We never ran it at a higher speed than 450 revolutions per minute, and it never choked or delayed us one minute. No more carrier elevators for me.

Cassel, Ont.

H. BOLLERT.