

day experience has rendered his eye familiar? And, why should an answer to these queries be a record of his ignorance? There is no other productive business, or manufacture, which is or can be carried on in so great ignorance with success; it is not reasonable to suppose then, that the success which such limited knowledge attains is only comparative, and that a better acquaintance with the fundamental principles of his calling would ensure much larger profits and more certain results.

A farmer need not be a Professor of Chemistry to learn that carbonic gas is assimilated into woody fibre, and becomes oak, or beech, or maple; that the straw of wheat is formed partly of flint—that the land he tills is decomposed rock, or vegetable or animal refuse; that vegetables feed or breathe, that each particular species has its idiosyncrasies,—its likes and dislikes. Why, he would never think of feeding his dog upon oats, or his horse upon flesh, yet he is hardly arrived at a similar distinction in feeding his crops. Special manures are rarely thought of, and the common and staple friend, the barn yard muck, frequently drawn out, and placed in small heaps in the field, often lies through weeks and months of a summer's sun evaporating all its most valuable properties.

Let us hope, Sir, that that widely spreading intelligence which is diffusing itself so rapidly over all the countries of the civilized world may, by its enlightening influence awaken us to a sense of our apathetical and culpable ignorance.

Let us hope, Sir, that an earnest and profitable enquiry may, by dispelling error and prejudice, bring to our minds a thorough conviction of the darkness through which, at present we grope our way to important but uncertain results.

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GUELPH FARMERS' CLUB.

SUBJECT:—FALL AND SPRING PLOUGHING.

After an adjournment of some six months, "The Club" held their first meeting for the winter season, on the 8th Dec. Col. Saunders, President, in the chair. The attendance of members, was very respectable and considerable interest appeared to be manifested in the business of the evening. The subject for discussion was, "The relative advantages to be derived from Fall and Spring Ploughing," which was introduced by Mr. Geo. Murton, as follows:—

MR. PRESIDENT AND GENTLEMEN,—The subject for discussion this afternoon is,—The relative advantages to be derived from fall and spring ploughing. In introducing this question I fear I shall not be able to do it the justice it merits, and I also feel diffident in giving my opinion in the presence of men far my seniors both in years and experience in agricultural pursuits. However I will do the best I can to open the discussion and then leave it for abler men than myself to give us their views on the matter.

The benefits to be derived from fall ploughing in my opinion are many; one of which is, that by getting a portion of the land intended for spring crop ploughed in the fall, it enables us to get our seed in the ground much earlier than we otherwise could. By ploughing a good stiff furrow and then using a cultivator in the spring, I think we can get a much better crop than if we ploughed a second time in the spring. Another reason why I do not think it advisable to plough again is, that it leaves the land too loose and light to stand the drought of our hot summers. Again, by ploughing your land in the fall and then cultivating it in the spring, as before stated you will reap another great advantage, which is, that you will have fresh soil to act upon your crop: whereas when you plough twice you are exposing the surface employed the previous year. By using a cultivator you can dispense with one ploughing. Another advantage would be that you could plough much later in the fall and thereby give the cattle a longer run over the stubbles. The land that is intended for spring crop should have the ridges well rounded, and the furrows thoroughly cleaned out, so as to allow the water from the melting of the snow in the spring to get away at once, instead of letting it remain to soak into the soil. I consider there is as much need of keeping the furrows open on land that is ploughed in the fall for spring crop as there is on our fall wheat, for land that has been so saturated will not work as well as if it had been drained in this simple way. With regard to the proper time for fall ploughing, I dare say there are a great many different opinions; my own is that it should be done as soon after getting our fall wheat in as possible, especially for turnips, so as to give time for the grass to decompose before the hard frost sets in; if not, it will remain quite green all winter and then it will be altogether unfit to plough again in the spring, if the farmer were so inclined. A good proportion should be done before the time comes