

but some of the fibers still have a hold on the soil, as the surface soil is heaved up with the root. As the damage is always done in the spring by the light frosts that only freeze the ground an inch or two, the solidifying of the wheat and ground by hard continued frost does the wheat no harm; it is the separation of the soil from the root that is the cause of the trouble. And it is surprising, after a rain in the spring, how soon vitality is shown on these plants, and many a field that has appeared

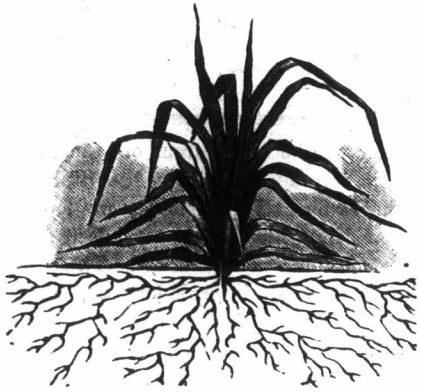


FIG. 2.

worthless in the spring has yielded a bountiful crop at harvest. Figure 2 shows the plant from surface or shallow planting. There is less liability to winter killing on clover or grass lands returned than if plowed three times. The second plowing leaves the decayed roots on the surface; these the wheat secure and it protects them. Where you find most of the roots at the surface the best wheat will be found, and the least damage done by winter killing.

The Herd Book Trouble.

From one of our exchange papers we learn that a syndicate is now being formed among a very few to purchase a certain breed of Shorthorns. The one selected being of fine appearance, but one extremely defective in vitality on account of in-bred and hereditary diseases, which it may be liable to impart. The latest herd book is found to contain too many animals, and the names of some parties, among them practical men, that are not wanted. Every conceivable plan must be devised to reduce the number of animals and obliterate the names of some owners. Chagrined as many good farmers have been by the effects of the recent curtailment, you may now contemplate a still greater cut on your herds. The sole object of such is to make money for a few monopolists at the cost of all practical farmers. If the plan is carried out, but very few of the animals in the latest herd book will be known as anything but scrubs. Government influence is sought and has so far been attained through herd book manipulators. The syndicate will embrace the wealthiest stockmen. The manipulators of exhibitions will be under their control, and large prizes will be awarded to Shorthorns, for the encouragement of this syndicate; all other exhibitors must bow to the golden calf. The Government exchequer must be drawn in to have the most able compilers to write or rehash everything that has been or can be said to advance this plan. Such literature, whether in the form of caricature or upon sound facts, must be disseminated under the guise of educating the farmer, but the golden calf operator pulls the wires. Could we believe this plan would tend to the advancement of the prosperity of the farmers or the

benefit of our country, we would most assuredly endorse it and aid it, but as we have seen so much of the devices and plans of operators during the past 21 years; the publication lists of fabulous prices having been obtained that were never paid, or ever intended to be; the false statements made in regard to health of animals, and the devices knowingly practised by manipulators to suppress truth regardless of all consequences, cause us to look on the movement with grave doubts, as to countenance it with our present views must tend to the greater demoralization of the people, which is totally unnecessary for our safety and well being. The records of the measurement of an animal for the shambles and the extent thereof may be but slightly tampered with, but the prices paid for animals can be quoted at anything without the slightest possibility of ascertaining the facts. Even the milking capacity of some cows has been given in professional stock papers at such enormous figures that any practical farmer or dairyman is astonished.

We have milked a cow in England that gave 16lbs. of butter in a week; this was considered uncommon there. We heard of one cow that gave 19lbs., this was considered a miracle. We have no such pastures here and no better animals, nor any better management, nor more honorable people, and yet our stock papers publish yields of 26lbs., 30lbs., 36lbs. and 46lbs. of butter per week from one cow. Unless we advocate and endorse these statements we are termed advocates of scrub stock.

No one appreciates a meritorious animal more than we do, but we do not believe that any cow ever gave 46lbs. of butter in one week, unless the butter or cream was taken from other animals, and by means of tubes forced through the cow.

The editors of stock papers that publish these enormous yields and enormous prices, should enlighten the public as to how these yields are produced, and what has become of the money. The recipients of these fabulous prices, from our observations, instead of accruing large farms, many have now no farms, but menacing creditors; and the scrub farmers, as they are termed, have to draw from the products of their scrub stock to pay the travelling expenses and the printing and dissemination of this exaggerating, misleading, demoralizing literature under the guise of agricultural education.

Our Illustration—Westwell Farm.

"Westwell" was the name of our home in Kent, England, and we gave the same name to our farm in Delaware, Canada. Only part of the place is shown in the illustration, which was got up hurriedly by a Chicago artist. It is fourteen miles from London. Your editor cleared the forest from most of it, and erected the main buildings you now see. This farm was one of the first settled in the township, when the only means of approach was by the canoe. Mr. Weld purchased it when a small clearing was made, and a small log house erected on it. On this farm he learned to chop, log, split rails, build, sow, plant, etc. This farm is now worked by two of his sons.

It was here that the idea of establishing an Agricultural Emporium first originated. The first Fife, Scott, Clawson, Democrat, and many other varieties of wheat that were introduced into this county were raised here. Some of the varieties had never been heard of in Canada previous to this. It is from this farm that most of the best wheats now raised in Canada can be traced by the farmers. They were disseminated in four-ounce packages to all parts of the Dominion. Every horseman of note has heard of Anglo-Saxon—no horse ever carried off

such honors. On this farm pure Ayrshires, Shorthorns, sheep, pigs and poultry were raised; prize fruit and roots grown, and prize cheese, butter and bread have been made here; also the best implements are used. The crop of apples from this farm the present year is estimated at 2,000 barrels, and the trees were principally planted by the hand that holds this pen.

Knowing how much good we did, and how much the farmers appreciated our undertaking, we have this year recommenced our experiments, after a lapse of eight years, on a new plan. We have engaged the best talent we could procure for this purpose to take charge of this department. We have expended ten times as much this year as we ever did for scientific research, and trust that between the practical work of my sons on those farms and the special labors of scientific experts on a few acres near this office, that I shall be able to furnish you with such reliable information as must be of use and importance to you, and such as cannot be correctly attained in any other way.

From this farm has emanated what all Canadians say is the best agricultural publication ever issued in Canada; and some Americans say, superior to any produced in the States; and the best European editors admit that the *ADVOCATE* has more than double the number of subscribers of any published in Great Britain.

Stock-Raising and Grain-Growing in Relation to Soil Fertility and Exhaustion.

No. I.

This question has recently been brought into great prominence through the agricultural press, and although we have commented on it, yet we find it too broad to be embraced within the limits of an ordinary article, and it is therefore our purpose to present the subject in a series of chapters extending over the winter months, hoping that our readers will honestly weigh our arguments.

The practical importance of the problem cannot be denied, it being the interest of every progressive farmer to know the special bearing of each department of husbandry upon the fertility or exhaustion of his soil. We entertain no prejudice, and have no personal interest to serve; our only aim will be to present the truth, and instruct our readers in the first principles of their calling.

In this Province the problem first elicited attention a few years ago, when the doctrine was promulgated by Prof. Brown, of the Model Farm, that farmers must raise stock to maintain the fertility of their farms, the question of direct profits being a secondary consideration. We first heard this gospel at a farmers' institute held in the town of Woodstock, and we remember the sensation which it created, many farmers, however, accepting it as truth, having emanated from the brain of such a popular and distinguished professor. It was a glad day for our live-stock speculators, who, through their organs and in every other available manner, rode the hobby to death, and a modified phase of the question, since the collapse of live-stock booms, has been that stock must be raised not only for the purpose of maintaining but also increasing the fertility of the land, which, it is contended, can be accomplished without the use of any food or fertilizer beyond that raised on the farm. The whole question, put into a nutshell, resolves itself into this: Can the fertility of the soil be maintained or increased by returning a part of its own resources? The defenders of this theor