

much work in harvesting, stacking and threshing, and grain could be carried earlier than when the green foliage of newly seeded ground is gathered with the grain. Where the straw and after-cut is required for litter or feed, it can be taken off as we have seen done in England, after the grain crop is harvested.

The grain, when cut, falls on a canvass carrier, and is carried to a suitable rack; an iron arm presses the grain tightly together, and a wire band is put round it and fastened. The sheaf is then dropped to the ground. We found the sheaves firmly bound. A cam is placed at the control of the driver, to raise or lower the cutting bar at will; he is also enabled to have a sheaf bound at any time or at regular intervals. On grain that stands up a great saving must be effected, as a man and a span of horses can cut and bind from six to ten acres per day with it. If the grain is badly lodged, we do not consider this machine would answer as well as the self-raking machines. It is our impression that it would take the grain off the land so much cleaner than any other machine we have yet seen work, that it would be a great saving to use it where practicable to do so.

Mr. L. D. Sawyer, of Dundas, is the introducer of this implement. It is called the Garden Potter. We believe Mr. Sawyer intends manufacturing them for the next harvest. This machine was imported from the States. These implements will not cut the straw as close to the ground as some other machines, but as close as is generally required.

Seed Wheat.

This is now the tenth year we are called on in a public manner to furnish you with information regarding one of our great staple products, fall wheat. During that brief space of time we have found it necessary to call your particular attention to nearly as many new varieties as we have been years publishing your journal.

Ten years ago we were obliged to condemn those two superior kinds of grain, such as none since have equalled in yield and quality combined, viz., the Soules and the Blue Stem. The midge so injured them that every farmer lost money who persisted in sowing them. We then disseminated the Midge Proof and Michigan Amber or Rappahannock wheats, which were nearly or quite midge proof.

These varieties, although yielding more profitable returns, were always objectionable because of the weakness of the straw, it being more troublesome to harvest than varieties more recently introduced. The next variety was the Deihl wheat, which became a great favorite, especially among farmers that had light soils or early, well-drained land. This variety was also preferred for its clear white appearance; confectioners gave its flour a preference; millers liked it because it gave a whiter appearance to flour when mixed with other wheat; for a time the flour sold well. But a great fault in that wheat, despite its beautiful appearance, is that the quality of the flour is inferior, being deficient in gluten. The Deihl wheat has yielded large crops in thousands of instances, but it is now the most precarious wheat to raise; it is very apt to rust, will grow on the head quicker than any other grain, and on heavy clay land is very apt to be killed in winter or spring. We believe more money has been lost by farmers continuing to raise it the past year than from any other kind of crop we have tried.

We introduced the Treadwell shortly after introducing the Deihl wheat. The Treadwell wheat gave good satisfaction for several years. Many fine fields of this wheat are raised this year.

Eight years ago we commended a trial of the Scott and the Weeks wheat. The latter we procured from Pennsylvania, and the former was im-

ported from Indiana. Many farmers like the Weeks variety, but we gave the preference to the Scott Wheat. This was not much thought of at first, because of its red colour and its liability to shell on harvesting. But for the past three years it may have claimed the superiority over all other varieties for the following reasons: First, its hardness, as it would resist the severity of the winter or spring frosts better than any of the former varieties; no wheat could stand the uncommon severity of last spring without injury. Secondly, another great advantage this wheat possesses is that even after a field of it, or part of a field, may have been badly injured, it will gather up and make a better crop than any other variety under similar circumstances. Thirdly, it also possesses another advantage which all should consider, that is, it will resist rust better than any other variety we know of. And although this variety is of a red color, it will make a superior quality of flour; no winter wheat sown has yielded so large an average crop per acre for the past five years as this wheat has.

Last fall we introduced to you the Clawson or Seneca wheat. This variety was selected from other wheat by a farmer named Clawson, in Seneca County, New York. This is a red-chaffed white wheat. There is as yet but very little of it in the country. We raised some on our farm, but only a small quantity; we find that it stood the winter and spring frosts quite equal to the Scott wheat. It showed a little rust on the straw, but it filled well and stood well. The reports we have of it from all sources are of the most satisfactory character. One or two seasons is not a sufficient trial to discard all others for any new variety, however well it may turn out at first. We commend new seeds to be tried only on a small scale at first. After a trial, continue to sow the best; you will not regret investing a small sum on this variety. Of course all new varieties are dear at first, but it only takes a few years to have a sufficient supply, and then only the common market price can be obtained.

On a judicious change of seed the ownership of thousands of farms depends. Those who changed in time to avoid the loss by midge made immense sums, and those who changed from the Deihl to the Scott have made a good hit the last few years.

Some of our readers may not know the difference in the appearance of the several kinds of grain spoken of, and they may in some districts be known under other names. The Soule's wheat is a bald, chafed, white grain. It is much larger than the Deihl—the heads long and rather open between the kernels. Mediterranean wheat has much improved in appearance and quality since the first importation. The head and grain are long, wide set, with head bearded. Color of grain, red. There are also white and red chafed varieties. Midge-proof—straw moderate length; heads rather short and bald; color of grain, red. Michigan Amber, or Rappahannock, is of an amber color; growth and appearance otherwise much resembling the Midge-proof variety. Weeks' bearded—color, white, both in grain and straw; grain rather elongated. Treadwell—straw and head rather long; chaff, white; the grain is a clear amber in appearance—almost white; there are two varieties, bald and bearded, though it is generally found in a mixed state; when first introduced it was thought to be inseparable, but now you can procure either bald or bearded; some farmers are highly laudatory of the bald, while others as strongly adhere to the bearded variety; it has been a very profitable and valuable wheat. Since the introduction of the Scott wheat the Treadwell has gradually decreased in cultivation, as the Scott wheat was found less liable to rust, and rather more hardy. The Deihl wheat has a short

thick set head; chaff red; it is a bold wheat, rather short in the straw; the grain is short, white and generally plump. The Seneca wheat is a red chafed, white wheat, of good quality, but not yet generally known in Canada; it has proved itself quite as hardy as any, and has yielded well; it is rather more liable to rust than the Scott wheat; all that have it appear highly pleased with it. The Silver Straw is a new variety which we know but little about; it was imported from New York State, and is a bald, white wheat; the report about its yield and quality are good, but we have no information regarding it from Canadians, nor have we tried it ourselves; therefore, it may be well to leave further remark until it is tested in our country. The Scott wheat and the Seneca wheat are the two varieties we most highly commend this season.

The Potato Crop—Is it a Profit or Loss to the Growers?

This is a question that has been frequently asked, and especially since the additional expense caused by the potato beetle has to be borne. It is said that at a less price than a half a dollar a bushel, the farmer growing them for sale does so at a loss. We should not be contented to grope in the dark in this or any other matter, when we can easily arrive at what are the facts. The profit or loss of a potato crop, as of any other, must of course depend on the yield. A crop of 100 bushels per acre may leave no profit; a yield less than that may entail a loss, and a crop of 150 bushels may pay a fair profit.

Let us first take the debit side of the account and calculate the expenses. We cannot present an exact debit and credit, but there is no great difficulty in presenting one to answer all practical purposes. The three items of cost, exclusive of rent or interest on purchase of the ground, are labour, seed and manure. In many cases there is no application of manure for the potato crop; this leaves one item less to the debit side. Of this item, when to be charged, the cost is the most difficult to calculate. It depends so much on locality, quality, and distance to be hauled, that a charge fair in some instances, would be too high or too low in others. And as manure, when applied, benefits not only that crop, but also some succeeding ones, we can only charge it with its proportion of the cost.

The potato crop stands debited with the following items:

Plowing and harrowing one acre, \$3; opening and closing drills, \$3; cultivating, \$3; plowing out potatoes, \$3; laying the seed, and picking potatoes after plowing, \$3. Total charge for labor, \$15.

Manure and hauling 12 loads, say \$1.25 per load, \$12, of which half is to be charged to potato crop, say \$7.

Seed, 12 bushels at 50c. per bushel, \$6.

These charges make a total of \$28. We do not

debit for destroying the potato beetles; they may

be only temporary visitants, and now the cost is

little over one dollar per acre.

The items in the debit column are high, but

nearly enough to prices usually charged to enable

us to make a fair estimate. These charges imply

good culture, and consequently we should expect

good returns, other circumstances being favorable.

It would not be unreasonable to estimate the re-

turn at 180 bushels. Last year was not favorable

for potato growing, and we find two electoral di-

visions in Ontario giving a return of 180 bushels

each, and one a return of 200 bushels, and as there

are many below, so there must be many above that

number to make an average. On any farm, 180

bushels on an acre of ground, well cultivated and

manured, would not be too much to expect, even

as an average for a number of years. With a

yield of 180 bushels, and per bushel would be little interest on purchase would bushel. The expenses of in some of the items, and the potato grower, for his is credited with these estimates.

As the expenses of growing great as of a heavier one much as below a good yield increases in proportion. heavy crops. Of 150 bushels it would be 27c.

Bad farming, and consequently leave profit.

Light Crops and

Are high prices with light crops to the farmer, or the reverse? A doubtful question, we would prefer the high price paniment. But there can be no question. Were the produce the prices low, or were it so high that the amount of 25 bushels, the amount of 25 bushels in both instances would be equal. far both would be equal. not end here.

With abundant produce out the land. Food is a and the live stock on the the interest of the farmer to market none of his in grains from his fanning should be used in the far the mill are for the stock the fields of heavy grain the merchant and miller, his granaries filled with convinced that, even if a a luxuriant growth, with- ing for all.

Correspondence

SIR,—It is perhaps for you sent me was so long, not far advanced when came on the 4th June, a state to be more benefit sown earlier. It tiller with drooping panicles. name of these oats, as I them for sale as seed oats. The fall before last I from a farmer in the town that and some Treadwell Both were partially winter wheat the least, and it last fall I sowed the again partially winter k a crop, but it is of ex last week. The spring even potatoes, wherever of. But the Colorado numerous than ever; he prey on them seem to years more I trust these passed away. Hay is a few places where the sharp June frost was on those on either side although one of my n its effects on some net was in a low sheltered cessions much damage timothy and early pot probably owing to the gian Bay. To the same that our potatoes are fall frost for a fortnigh cessions, or in the town found. Too much pr We had a sharp frost roof of my barn was a.m., but a row of dw