Crop Prospects around Derby.

To the Editor of THE CANADA FARMER:

SIR,—The weather, since the middle of June has rather assumed the character of wet, and the consequence is that there is the promise of the heaviest crop of straw of all kinds that we have seen for many years. Hay on the whole is a very heavy crop, and in some cases really prodigious. I hear of timothy nearly six feet in length. I measured some stalks of clover in one of my fields that measured 3 ft. 10 in. Haying commenced a fortnight ago, but, owing to the wet weather, it is not very general yet. Next week will be the busiest hay week of the season should the weather prove favorable Fall wheat is generally very good, and will be ready to cut in from a week to a fortnight. There is no appearance of the midge or any other insect pest this year. A little rust has made its appearance on the straw within the last few days, but not enough to do any injury in the advanced state of the crop. Spring wheat and oats are to be seen in all stages of growth, from the short blade to the well formed ear in full bloom. The quantity of straw will equal any crop this county has ever seen, and should the yield of grain be proportionately large, the quantity of grain to go to market in this county will be really immense Barley, too, promises to be an unusually heavy crop, and I think there is a greater breadth sown than has been usual here. The light crops of wheat of the last two or three years, and the high price of barley, for the same time, has led to this. Should barley reach the price of the last two years next fall, our farmers will realize a large sum from this crop. It is much to be desired that some other kind of grain could be found to pay as well, or better than wheat, as I am of opinion that we sow far too much of it, for the good of our farms. I know one of my neighbours who has the fourth crop of spring wheat in succession, on the same field, this year; he says, this one promises to be the best of the four! It is quite a common occurrence here to see two or three crops of the same grain in succession. Another of my neighbours told me the other day, that he intended to turn over his fall wheat stubble, and sow fall wheat on it again, as the land, he said, was good and strong, and could bear it. Now, such a system of farming must eventually exhaust the soil and render even an ordinary amount of wheat cultivation unprofitable, and should this unwise system of cultivation be the means of generating insect pests, those who have paid proper attention to rotation of crops, will suffer as well as those who have not.

Should the present scale of prices continue, there are three things that would eventually pay much better than an over-cultivation of wheat. These are barley, wool, and flax. I am glad to see that the whole of them are receiving increased attention.

A CANADIAN FARMER.

Derby, July 14, 1865.

Prospects of the Hop Crop.

THE *New-York World*, which devotes considerable attention to this subject, in its issue of the 28th June, remarks:

The increase of vermin has been considerable during the past week; both fly and lice being much more numerous. This condition of things strengthens the impression that the crop of this year is to be affected in the same way as were those of 1863 and '64. In other respects the vines have continued to grow rapidly, and, owing to the absence of cool and windy weather, have adhered to the poles with unusual tenacity. In some sections the leaves have been observed to turn red and shrivel, this appearance first manifesting itself in those leaves lowest on the stalk. The indications resemble those attributed to "fire-blast," in England. The disease there has been referred to a deficiency of nourishment in the root to supply the exaction of the growing vine, so that the leaves are deprived of the nutriment essential for their preservation in a condition of health. The principal cause which has been assigned for this defective circulation, is the use of a longer pole than the vigour of the plant will warrant; and as the yards this season abound in feeble plants, the "fire-blast" will be likely to exhibit itself extensively. However, so little has hitherto been known of any such affection in this country, that no opportunity has been afforded of verifying the theory named, which is based entirely upon foreign authority. It must be remembered that the blight, arising from vermin, is quite new on this side of the ocean, and while American growers have acquired a rapid and very costly education in all the mysteries of the foreign "black-blight," they will probably also acquire an experimental knowledge of the several other diseases which have long existed in Europe, and which, in their origin, may be more or less closely connected with the devastations of the *aphides* that have occasioned the blight of the last two seasons. Some vines from foreign roots have been observed to be particularly infested with lice already, and, besides, give indications of being afflicted by the blast.

Dealers are beginning to manifest a good deal of anxiety about the condition of the growing crop, and good hops, of which there are very few of last year's growth, are held with much firmness.

Remedy for Sorrel.

A CORRESPONDENT of the New York Farmers' Club, writing from Wisconsin, asks:—What is the best method of ridding the soil of sour-grass, vinegar-plant, or sorrel, as it is called by these names,—there are many farmers troubled with it, and a great many plans have been tried.

To which Solon Robinson replies:—Have you tried dressing the land with caustic lime, at the rate of 30 bushels of the powdered lime, freshly slaked, to the acre, spread upon the surface with wheat seed, and harrowed in at the same time? Have you tried wood ashes, a pint upon each hill of corn or potatoes? Have you tried deep fall ploughing, so as to turn up some of the strong clay of the subsoil, and letting that pulverize in winter, and then seeding it to timothy and clover in the spring? Afterward, top-dress the grass every autumn with manure free from sorrel seed, or dress it with lime, ashes, or finely powdered clay—the debris of an old brickyard is good—and if some of these remedies won't cure your land, you may as well emigrate.

Draining Machine.

To the Editor of THE CANADA FARMER:

SIR, The expense of draining is the great stumbling block, and I do not think any large extent of Canada will be drained unless some ingenious person will invent a machine to dig drains. Mr. Chase, of Brooklin, invented a machine for this purpose some three years ago, and obtained for it two prizes of $60 each. Since that time I have heard no more about it. Could you, or some of your correspondents, give me any information about it, or whether there is any other machine to be had that will dig drains in gravelly or clayey soils, its capabilities and cost; also where it is to be had? I was very glad when the judges awarded a prize to Mr. Chase, as it showed they understood the benefit and desirability of such a machine. The Society were prepared to pay him, or any other person, a further prize of $60 at Hamilton, for a machine to dig drains, lay the tile, and cover them up. It appears to me an absurd idea to attempt to lay the tile on the principle of Mr. Chase's machine, which is to place the tiles in a spout and slide them into their place as the horses draw the machine up and down the drain. To prove the truth of this, let any person take a load of caps for fences and drive down by the fence, and drop one at every corner as the horses are going, and he will find it as much as he can do. How, then, can any one drop tiles, that require careful handling, on every foot or two feet? Two might be employed in dropping, but any more than two would be in each other's way. Let the Society award a large prize for a drain-digging machine, even supposing it will not throw out the dirt, as there certainly is nothing requiring more fostering and encouragement than under-draining." EDWIN BROWN.

Trafalgar, July 18, 1865.

☞ A young farmer asked an old Scotchman for advice in his pursuit. He told him what had been the secret of his own success in farming, and concluded with the following warning:—"Never, Sandy, never—above all things, never get in debt; but if you do, let it be for manure."

GREASE THE IMPLEMENTS.—A correspondent of the *Prarie Farmer* truly says that the application of grease (unsalted) to ploughs, cultivators, hoes, spades, &c., would save much labour in scouring. Whenever any implement is to remain unused for a short time, let the grease rag be used at once.

DEATH TO WEEDS.—The Boston *Cultivator* says: "Let it be a rule of every thrifty farmer that no weed shall be allowed to bloom on his cultivated grounds." The same rule should also be extended to the uncultivated ground—to the corners of fences, stone heaps and other waste places, where weeds delight to grow and where they are too frequently allowed to go to seed.

MIDGE ITEM.—A correspondent of the *Country Gentleman*, who recently visited the farm of John Johnston, says that his whole estate is underdrained with tile drain, 30 feet apart; that he has 24 acres of wheat earlier by several days than any upon undrained land; and, he significantly adds, "*the difference of three days often saves the whole crop from the midge.*"

BEECH NUTS.—The *Goderich Signal* says:—"We have not seen such a heavy crop of beech nuts for the past ten years as there is this season. The trees are literally brown with them. Judging from appearances, it will be an easy matter to 'keep hogs over' this winter, and buyers will have to look out for beech nut pork."

COMSTOCK'S "ROTARY SPADER."—This American instrument has lately been tested in Essex, England, and the *London Field* gives an account of the trial with an engraving of the machine. The following is a part of the notice, which is highly complimentary: "The land here is rather stiff, but very well worked, the ground being used chiefly for the cultivation of vegetables for the London markets. A rotary spader of five tines, and three feet wide, was brought out, and four horses attached. The machine was set in motion, and by the lever the tines were thrown into working gear. On inspecting the soil after the operation, it was found broken up to a depth of 8 inches good—the length of the tines. From the nature of the ground it was worked a second time. The clods were now thoroughly broken up, and with a light harrow passed over to collect the weeds, which the action of the tines partially throws to the surface, the ground would have been perfectly prepared as a seed-bed. The machine worked admirably well in all its parts, and is a complete specimen of good mechanism. There were no stoppages, no mistakes were made, no breakage of any kind; and, considering that this was the first trial in this country, the inventor deserves credit both for the construction of the machine and for the principle of its construction. On light land, but one operation would be required; and it is evident that even on wet land it will work well, as the tines are self-cleansing."

SUB-SOIL DRAINAGE "MOLE."—A correspondent of the *Scottish Farmer*, finding that, even with the ordinary number of deep drains on his land, the water is not carried off soon enough to allow agricultural work to proceed in due season, has invented a new subsoil sock, to facilitate the drainage. Its construction, and the advantages to be derived from its operation are thus described:—"Agriculturists must admit that all the bottom of naturally dry land is a drain, or acts as a drain, to carry off the water that sinks through the soil. Now, in draining land, it would never pay to follow nature altogether, and put in a new bottom; but we must approximate as near as possible to nature, and do artificially, and at a remunerative rate, what nature has done permanently for good land. This I have effected by the following plan: I took one of Bentall's subsoil ploughs with four wheels, and caused the blacksmith to make an instrument something of the shape (in the horizontal part, or the sock that enters the ground to form the drain) of a soda water bottle, but with a strong steel point. I started in the autumn, and put two common ploughs to work, to plough two fields of about 35 acres each, causing the two ploughs to go as deep as possible in a line transverse to the line of the tile drains, which had been put in four feet deep and 30 feet apart. I then put three horses yoked with a set of compensating whippletrees, to Bentall's subsoil plough, with the instrument before described, and which I call a mole; and with this I followed the two common ploughs, to a depth of from 18 to 20 inches, but bringing up no subsoil, only making a small drain every alternate furrow, to facilitate the passage of the water to the tile drain, and making the land artificially to have an open bottom, something approaching to the bottom of naturally dry land. These lateral drains are made at such a depth that the tread of the horses cannot injure them, and by there being only one in every alternate furrow, the walls, as I may call them, or sides of the drains made by the mole, are kept stronger, and consequently more permanent. I may mention that the mole presents so little resistance that the three horses can go much deeper in clay subsoils than most farmers would believe. This experiment was made on the two fields before mentioned, and although they have a strong retentive subsoil, they have kept quite dry during the winter, and are now mostly put under turnip crop in good order, earlier, and with less work than any land of the same kind in the district."