e, 1874

eeders of Lei

erkshire Pigs ce animals of ale, from IMcochrains.

Lincoln Sheep, р erkshire pigs; for service.--3-1y

t. Breeder of nd Berkshire 3-1y

, Breeders of izes at Guelph 3-1y SALE.

E. Aged 1 yr ris, Byron. A few young leifers — good mostly red.-ulars— UEACOCK

EACOCK, by P. O., Ont

11 MONTHS THOS. FUL-

OLUMN. Farm for Sale for TWENTY one cent and dditional word ortisements are None others above, will be

-Nearly 2 years nited number of ly to G. Jarvis

 \mathbf{E} :

THE COUNTY 1st. Concession, 205 acres, 170 nbered. There and two Frame chards of choice her young. A. of the clearing. ies, and is with-o Station, G. W. o WM. WELD, LLL, on the pre-

E.

OT 6, CON. 16, cres cleared, 30 h London, 1 mile Granton Station. l watered, good m. Price \$5,000.

OR, GRANTON.



{ WILLIAM WELD, Editor & Proprietor. VOL. IX.

Dominion Grange, Patrons of Husbandry.

We take great pleasure in informing our subscribers that our Dominion Grange has been organized, and that we need no longer send any of our money to the United States or be in any way subject to them. Dele-gates from the different Granges throughout the Dominion met in London on the second day of June, and there, by a unanimous vote, decided upon the organization of our Dominion Grange, adopted a constitution

and by-laws, and appointed officers. Of this meeting we can only say that the speeches and work of the representatives present showed very plainly that we do not need to go to the lawyers for men of ability to represent us in Parliament, or to the merchants for thoroughly practical business men. There was no hesitation, no stuttering, no want of words to convey ideas.-Many of the speeches contained the true germs of eloquence, and all of them were practical and business like, and we felt that we had just cause for being proud of our brother farmers. For list of officers and other information see Patrons of Husbandry Department on another page.

Fall or Winter Wheat.

the former. That arose, no doubt, from the seed being more deeply deposited; the roots of the plants got a deeper hold of the moist If you determine to try your fortune with soil, which enabled them better to withstand fall wheat, let your determination be arrived at at once. And first—what preparation, if the drought. any, have you made for fall wheat? First any, have you made for fall w. The spring there is the brown bare fallow. The spring crop in it has been a failure. A better field sally admitted that drill sowing is suitable for good land, while it is held to be a bad

LONDON, ONT., JULY, 1874.

This last

the furrow evenly over the ridge. At the

Second Mode-Sow the seed broadcast

over an even surface, and plow it under with a six inch score. The last score —the nar-

team of its last pint of seed. This last score will, of course, clear up the furrow.

Third mode-The Drill. On this we give

the following report from one of the largest

DRILL VS. BROADCAST SOWING.

was satisfied that it was the right principle

of depositing the seed, and soon became so

much prejudiced in its favor as to become

an enthusiast, convinced by careful observa

tion that it was in every respect the best

system. In the very dry season of 1868, the difference, as I observed, between drill

and broadcast sowing was very marked by

the increased quantity of straw in favor of

"The very first look I got of drill sowing, I

three men per day to the acre.

farmers in Aberdeenshire:

the broadcast portion being all first taken from the field, and the drilled after, and headlands leave open drains to carry off any lying water. You cannot clean out the furrow too deep. This trenching, if pro-perly done, deep as a man's knee, will take each stacked quite separately. Every care was taken in the threshing, each quantity being taken separately into the barn, and when threshed put into bags, which were weighed without measurement to 4 bushels of 40 lbs. each. The drilled portion, by the bushel, weighed about half a pound more than the broadcast, and as to quantity, gave row strip remaining last unplowed-must fully one bushel more per acre than the then receive a little seed additional, having been deprived by the action of plowman and other.

"As a set off against such a result, many farmers object to drill sowing on account of its retarding operations, by taking away a pair of horses from the harrows, but I maintain, and can prove, that when the work is perfectly done it accelerates harrows. A

great many farmers harrow the land very imperfectly, only giving it about one-half of what it should get. The land should be well harrowed before the drill is put over it, after which it is perfect as to mould or tilth. It must be quite evident to any unprejudiced practical observer that a pair of horses in harrows will not improve the mould of say twelve acres in a day nearly so much as they can do by the drill. Imperfect harrowing is a bad thing for encouraging the grub, and also the growth of weeds. If many farmers would give their lea land two or three double stirrings more than they do at seed time, it would save them a great amount of labor when cleaning the land for turnips. For many years I have given the land extra har-rowing, and by it I believe 1 have in a great

"I resolved last year to put the two sysmeasure banished weeds from my farm. 1 not unfrequently see more weeds taken off three or four acres than I have upon one hundred. Another good weed destroyer is plenty of manure. I believe that Mr. Mechi's statement is substantially correct, 'that the land in this country is never half manured.' In conclusion, I may state that in our elevation and cold climate I don't approve of thin sowing; the difference should not be greater than one bushel less by the drill than by the broadcast. I have always found that in that proportion the drill sown was fully the thickest crop. Does not my improvement prove that broadcast sowing to a large extent in the first place wastes, and in the second, curtails the supply of food for the people?"

This, and double this, our country well. can produce. A crop one-half of thirty bushels will not pay. Give and it shall be given unto you. Give to your land good tillage and abundance of manure.

Orchard, Garden and Forest.

THE GAUSE OF THE DEATH OF FRUIT TREES.

We have had several complaints of the dying out of fruit trees, and enquiries as to the cause. One cause is that the trees are not taken up from the nursery with proper care. The roots are mangled, broken and otherwise injured. The greatest care is necessary to keep the roots safe, so that even the smallest roots-the very rootlets are in good condition to commence at once, on being planted, to use the plant food in their new home.

Not only are young trees frequently injured in taking them up from the nursery, but they are hable also to be injured in the packing and transportation from the nur-sery. It is necessary that they be kept moist and so covered from the air that they are not in any measure dried up, but remain as fresh as they had been in the nursery-as fresh till planted. We have had valuable trees killed from both these causes, some from having the roots cut short, broken and otherwise injured, and some from being exposed to the drought.

But it is to the killing of fruit trees after being planted and ving comme grow, that many refer. Some having re-ceived their trees in proper condition, and planted them in good, well-prepared soil, have had them killed. We believe that in almost every such instance the want of sufficient moisture in the soil has been the cause. While it is necessary that no water remain stagnant in the soil, it is as necessary that the soil be at all times sufficiently moist to nourish the trees, whose rootlets always take in their food in a state of solution. To the drought in the soil, and not to frost, has been attributed the death of so many young trees, fruit and evergreen. Trees wanting the vigor afforded them by the moisture of the soil and the sap, cannot withstand the frosts. To preserve trees through the long and often changing winter weather, it is well that the soil wherein they grow be thor-oughly moist in the fall, not merely such moisture as a Scotch mist would give, but wet down to and beneath the roots, and then before the winter sets in be well mulched. This mulching as a safeguard against extreme frost is as nocessary as it is against the drought of summer. As a substitute for the ordinary mulching we have these last two years placed on the ground in which the trees were planted a sod (peat or muck), with the grass side turned under, and we have found no better covering. As to other mulching, we give a preference to the leaves of trees for strawberries and flowers,



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lled promptly. Ad-WOOD, anneck P. O., Ont.

for your fall wheat you could not select out of the whole 250 acres. Turn in your oxen (the nimble-footed Devon is the best for the farm) to it, yoked to Gray's long plow; turn it up or under to the beam, deep as the top of the coulter hole. Turn it up with a clean, well-cut, furrow. Would you have a clean, well-cut, furrow. Would you have a good crop of fall wheat, plow deep—deep— have a good, deep, well pulverized, seed bed. The fall wheat of 1873 gives no un-certain warning. The mellow, well-tilled soil gives good promise; the stiff clay, badly worked, is a failure. Let your stiff clay soil be made as rich and mellow as possible. Make it resemble the sandy loam. Have you no bare fallow; turn up that pea stubble, you no bare fallow; turn up that you and at once. If there hasbeen a mixed crop, peas and oats, so much the better ; and the hogs have had undisputed possession of it for some weeks, all well. This is not all. Spread 30 to 40 barrels of quick lime on your clover aftermath. Turn it down ; the quick lime and the decaying clover aftermath and long tap-roots will soon give you a well-prepared hot bed, from which will arise every day a mist from the earth, that descending in gentle dew, shall water the whole face of it. And now-what is the best method of

sowing Fall Wheat? There are three modes, each in itself good. First mode—Plow the land in ridges five

feet six inches each in width, that is, let every three ridges be 16 feet and a half .--Sow broadcast, harrow well, and with the

system for thin land, I selected for my experiment a piece of lately improved and very thin, rocky kind of soil, not worth more than 7s 6d per acre of rental (or about two dollars a year.) It had been three years in grass, was heavily manured with bones when aid out, and the grass did well for the qua-lity of land. The experiment was conducted on fully eighty acres, which was ploughed into ridges of twenty yards in width, and the ridges were sown with the drill and broadcast alternately, so that each might get an equal chance of the quality of the land. The broadcast portion was sown at the rate of six bushels to the imperial acre, with barley five bushels, as owing to the softness of the grain the machine would scarcely discharge that buantity. The broadcast portion was sown carefully by the hand, and was perfectly done. I consider that drill sowing should be done across the furrows, as the seed is more evenly deposited; but in this case it had to be done along the furrows, as each alternate ridge was drilled, which I consider was a disadvantage. As harvest approached, the drilled portion began to ripen rather earlier and more evenly.

The crop was good for the kind of land. arately on the same day, and the produce of each ridge kept distinct by itself. This was

shovel cast every ounce of loose earth from in capital order and built by the same man, or even one tenth less, will pay the farmer and we prefer the leaves of pines and other

By the second and third methods the seed will be deposited at equal depths, and this in itself is no little advantage. There will be no upturning of the slender rootlets by the winter and spring freezing and thawing, and the concentrated earth along the side of each drill will form a bone to protect the tender plant in its seed bed.

Such is the labor attendant upon the sow ing of Fall Wheat. Of Spring Wheat we say nothing. Wheat has ever been and will ever be one

of the staple productions of Canada. So varied is our climate and so fertile our soil that we can grow it of a superior quality. A the more easily and perfectly accomplished by the scythe-men cutting right along the ridges. The whole was led on the same day cold winter and a hot summer are necessary

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