

other draft horse; that he has more bone, better developed muscle, better feet, more purely bred, better physical formation for heavy draft purposes, greater endurance for heavy and long continued work, more action, better disposition, better eyes, and the only draft horse that has a recorded pedigree in their native country, but to be able to accommodate all tastes and demands of their customers they have imported several French Percheron or Norman horses, and invariably show them with the Clydes.

Another interesting feature shown us was a lot of very choice imported Shetland ponies of the purest breed to be found in the world.

We next looked at the herd of imported Holstein cattle, of which they only have 10 females and one bull now on hand, but a herd of 10 more of their own importation have just been discharged from quarantine and are expected to arrive at the farm every day. This most valuable breed of cattle are developing very superior qualifications for the combined dairy and beef animal, giving a very large quantity of milk, and being of good size, early maturity, and taking on beef readily at all ages. Their Holsteins have been selected from the very top herds of Holland, with the determination to establish the best herd at "Shadland" that there is in America, and those shown us are certainly the best specimens of this valuable breed that we have ever seen.

We also saw a flock of very fine imported Highland Black-faced sheep, noted for the choicest mutton in the world. So an inventory of the aggregate of "Shadland" stock would be 100 to 200 head of the great Clydesdales, more than 100 Hambletonian horses, 50 imported Holstein cattle, besides some of their own breeding, a large herd of fine recorded Devons, a lot of Shetland ponies, and a flock of imported Highland Black-faced sheep; also a few high grade Clydesdales, and other miscellaneous stock. As we have before stated, the leading prominent features of the establishment is the stud of Clydesdales, of which they are constantly making direct importations and have the largest sales for of any firm in the world. They keep two experienced buyers in Scotland, and one of the firm is there frequently every year giving his personal attention to this department of the business. They are also breeding these horses largely, and can furnish pure native bred or imported stock, as wanted.

Some of the many advantages offered by the Powell Bros. to all who want the best thoroughbred stock may be stated as follows: 1st They are strictly honorable and responsible men, have abundant financial means to make them responsible beyond a question for all their representations. 2nd. They have been many years extensively in the business and buyers have the benefit of their superior trained judgment in the selection of stock suited to their different wants. 3rd. They have the largest lot to select from that can be found in the world, and therefore can suit all varieties of taste or peculiar qualifications desired. 4th. They have a world-wide reputation as keeping the very best, which is a guarantee of purity, and add no little value to stock that hails from their hands; and 5th. Their stock are all kept in perfect breeding condition and none ever tampered or fattened.

The Powell Bros are justly acknowledged, both in Scotland and America, to be the firm who have given the appreciated value to the Clydesdale horse, and were the first to put in print an authentic history of this most valuable race, and the Clydesdale Stud Book of Scotland show a far greater number of recorded stallions owned by this firm than by any other firm in America, Scotland, or elsewhere. Their business, of course, is very large, and their sales extend to every State in the Union and also to many customers in Canada. As an evidence of their popularity, their average is about fifteen men a day to look at stock, and one day the number was twenty, representing twelve different States, seven of whom had purchased stock of them in former years, and every one bought again. The day we were there we met a number from each of the States of Illinois, Indiana, Ohio and Pennsylvania. Their sales of Clydesdales alone average over one a day. On our way from the depot to the farm we met four of these grand horses that had been sold that day, going to Indiana and Illinois. Their customers invariably come back to them, when they want more stock, and they show many instances where five to seven different sales at different dates have been made to the same party, which is unquestionable evidence of the perfect satisfaction their stock and manner of doing business is giving to those who buy of them. Their immense business is all systematized and everything passes off as smoothly as the model manufacturing or mercantile concern. Every visitor feels, as soon as he arrives at Shadland, that he is dealing with gentlemen who will take no advantage of his lack of information or circumstances, and that he is abundantly welcome to their hospitality, and free to buy or not, without any undue solicitations, as his own judgment dictates. We should take pleasure in giving individual descriptions of the many very fine animals that we saw there, but the number is so large that space forbids the attempt in this article.

In conclusion we can simply add that we felt highly repaid for the time consumed in the visit, and can say without any hesitation that it is by far the grandest collection of really rare and valuable stock that we ever saw, and that every member of the firm is a gentleman of the highest order, generous in their hospitality, strictly straightforward in their business, and abundantly able to make good all they represent."

### Agriculture.

#### WILL PURE WHEAT TURN TO DRIPS?

Written for the CANADIAN FARMER.

In your issue of March 1st there is a communication from Isaac Mills under the above caption, relating a phenomenon which he says satisfied him that "no" would not be a correct answer to that often asked question.

Now, I do not write to combat that (what I think) foolish theory, but to simply notice what he says in the last sentence, viz: "If we sow wheat, we shall reap wheat, or some other grain."

If friend Mills understands nature as little as he seems to Scripture, I don't wonder he thinks wheat will turn to draps. In the first chapter of Genesis it is recorded that the grass and herbs which each were endowed with the next day after the creation of the world, and could be made to grow

to every seed its own body I apprehend Paul is trying to prove in this chapter, that the bodies we have when death comes to us, will be the bodies we shall have in the resurrection, and just as sure as wheat produces wheat, and no other grain, just so sure will these bodies of ours rise again.

I could as easily believe in the transmigration of souls, and that my body could rise in the shape of a horse as to believe any grain will produce anything, but its own kind.

I believe the Bible teaches a contrary doctrine to Mr. Mills' theory, and am satisfied if we could understand everything in relation to the production of chess, we could easily explain it on natural principles.

Thanking you, Mr Editor, for the space I have claimed.—G. M. GILMORE.

#### THE CULTIVATION OF CORN.

The constantly growing importance of our corn crop—a crop that can well be designated as the "king" (for no other crop in the country ever aggregated a billion and a half bushels in one year, as corn has done)—makes any information regarding its culture important. Without saying anything about breeding seed corn at this time, though I am convinced that at least one-third will be added to our crop by this means alone within the next few years, the subject of plowing is one that is of no small importance, and needs to be carefully considered. My own experience and observation have decided me as to two things in plowing, sod land for corn—spring plowing, and about four to five inch furrows. Corn is a plant that likes heat and moisture, and likes quite as well to have its fertility at the surface. Plowed late, two things will be secured—there will be no trouble from the grass growing up between the furrows, and clean cultivation is secured. Corn thrives best upon a decaying vegetable matter, which sod newly turned and exposed to the warm sun quickly furnishes. Then the decay of the great mass of roots and grass develops fermentation, and this adds heat, and with its ammonia, which latter the roots quickly absorb—both valuable helps in throwing forward the crop.

Land plowed in the fall must lose to some extent two elements of fertility; one is this active fermentation of decay. Soil lying exposed to the soaking storms of winter without the protection of mulch, must lose a certain amount of fertility by leaching. Stable manure will benefit the crop even upon very rich ground, and fifteen good loads of stable manure applied to the soil before plowing will tell in the corn. A neighbor of mine last spring partially covered an old meadow with stable manure before plowing, and the value of the fertilizer was about thirty-five bushels per acre above the remainder of the lot, though the unmanured portion was in every respect as good soil. Land should be thoroughly dragged and made as fine as possible before planting, whether this to be done with hoar or planter, and a lot well marked is about half planted.

Forcing the season does not pay. Corn will not make any considerable growth until the ground gets thoroughly warm. Being tropical in its habits corn will not germinate below 50 degrees, and growth is accelerated up to nearly or quite 95 degrees provided moisture is present. Corn does not grow during a cold, backward spring, neither is it putting out roots for future growth. When the ground is warm, and corn is put out, the

ception, it is time enough to plant, and corn planted May 20th will, as a rule, outgrow that planted ten days earlier. I have in my mind now a field of corn planted June 20th; a pasture plowed one day and dragged and planted the next which yielded more than an average of the corn planted a month sooner. It did not give so great a growth of stalks, but its corn was fully matured.

The custom of planting a field in proportion to its fertility is becoming quite common. A very rich soil will easily mature double the grain over that on a thin quantity of land. Another point should be considered. A great crop of corn can only be raised with sufficient moisture to develop the growth. A soil that quickly dries out will not produce as great a crop as one that holds its moisture, for corn is a great consumer of moisture and many plants make large demands, which may be met in a season of average rainfall. The water that would be sufficient to carry a field planted four feet each way, would in a dry spell stunt the growth, if five or six additional hills were also drawing their sap from the soil. As we do not know the amount of rain that will fall in a season, or just how it will be distributed, the crop should oftentimes have the benefit of the doubt. But whether the land is very fertile, or whether we have 2,700 or 3,000 hills, flat cultivation, and keeping the soil clean of weeds, grass, &c., each of which take up moisture that may be needed by the corn, will do much to economize the water supply of the soil. Every elevation of the soil above the level gives so much more surface to give off moisture, and hills are only a damage to the crop, for they not only dry out the soil sooner, and contract the spreading of the roots of the corn, but they contract the brace roots so that the corn is easier prostrated by storms.

Cultivate often, commencing by dragging it before it comes up, and after; at least once with a Thomas harrow. Do not cultivate deep enough to cut off the roots. Root pruning is not necessary on one field in a hundred, as a check to vigorous growth. Cultivate often, but stop when the tassels have nicely developed themselves. Corn does not want to be disturbed when the fertilization and maturing of the ears is going on.—J. G. Western Review, in Country Gentleman.

### POULTRY.

#### FARMERS AND POULTRY

Written for the CANADIAN FARMER.

When visiting brother farmers I always before leaving their place enquire about their poultry, what breeds they keep, how they manage to keep up their fertility, what they are fed with and what care they get, always requesting to see them, and while doing so observing their quarters whether it has been kept clean or left to take care of itself. I find the latter the rule. There are exceptions where the farmer takes not only good care of his stock of poultry, but takes great pride in their attention. When this is the case it is a delight for me to look at them. There are sure to be some carefully selected pure breeds which paid their owners well for the time and attention given for their comfort. When the attention of the farmer has been for anything but poultry and so keeps them because (there are a necessary evil) as one has said, they are of the "like Joseph's cattle," and very inferior specimens, as are every