

It was the opinion of many that the decay of the potato was constitutionally owing to inconsistent treatment; if so, the cultivation of the wild potato, which had not experienced the inconsistent treatment, would be a partial remedy. Accordingly, to test this opinion, the Central Board of Agriculture obtained a few seedlings from Mr. Goodrich, which were raised from the wild potato brought from some part of South America, which, according to report, are subject to the blight. This being true, the above opinion or theory will necessarily be exploded, upon condition that the seedlings are virtually the wild potato, respecting which, in my opinion, there is room for doubt, from the probability that Mr. Goodrich, while engaged in the commendable task of testing the virtue of the wild potato, was not sufficiently careful to prevent the flowers of the wild potatoes from being impregnated with the pollen of the diseased potatoes, which would constitute a diseased seed or germ in the balls of the wild potato; and while he reproduced the potatoes through the balls, the seed or germ, so implanted, would most likely come to the greatest maturity, from the fact of them being climatized, while those that were virtually the wild seeds or germs would propagate true to their organization, and would not come to maturity because such organization is not adapted to the climate in which they were reproduced. Hence the reason why, out of so many thousand seedlings propagated by Mr. Goodrich, so few came to maturity; and hence the probability of the Goodrich seedlings being the supposed diseased potato all the while. Let this theory be as it may, there is one thing which is considered very important among men of worth, that is, so far as they give their attention they give it undividedly, and so far as they experiment they experiment thoroughly, otherwise it only tends to mystify and confuse, which condition the world appears to be in at present respecting the potato, and is destined to remain, so far as we have any guarantee of a better state of things, until it is thoroughly investigated, which it is our privilege and duty to do. An investigation which we have no guarantee nor right to expect until there are men paid and sufficiently furnished with means, and set apart expressly for this purpose. Admitting such to be our duty in relation to the subject here treated, I would respectfully suggest for our Central Board of Agriculture to negotiate with our sister Provinces, Great Britain, and the United States, for the purpose of establishing a system of investigation, by which proper men will be enabled to give their undivided attention to this important subject. A proposition, in my opinion, if properly carried out, will constitute the most likely source, in fact the only source through which we have any guarantee of success.

Undivided attention, accompanied with energy and means, is the germ or secret of modern improvement, for which this advanced period of the nineteenth century is unequalled. One instance is sufficient to demonstrate this point, the connecting the Old and New World by telegraph, an enterprise which never would have been accomplished had it been left, like the subject of the potato, to scattered opinions and divided attention; men inclining rather to ridicule each others' opinions than to be courteous in striving for the truth.

JOEL DENSMORE.

Noel, Nov. 1867.

A PAPER ON PIGS.—DISEASE IN SHEEP.—WHEN SHOULD GRAIN BE CUT?

Carlton Club Farm,
Nov. 7th, 1867.

DEAR SIR,—Having some time ago promised the *Journal of Agriculture* a paper on breeding Pigs, as I now have an opportunity I shall endeavour to redeem my promise.

Treatment of Breeding Pigs.—The period of gestation in the pig is sixteen weeks; some old sows will go longer, but this may be taken as the general rule. If young sows be well done to, they will be fit to take the boar at eight months old. If allowed to run much longer, especially when highly fed, a difficulty is experienced in getting them to breed. The time of putting all sows to the boar will depend upon the season and demand for young pigs.

It is wiser policy to risk a young sow turning, than allow her to bring her first litter during the coldest time of year. It will not answer to keep sows, except in particular cases, more than 3 or 4 years to breed from.

Boars should be kept by themselves, in as quiet a place as possible, and always treated gently, or they are apt to become cross. There is often great difficulty in getting sows away from cross boars. To be successful breeders, neither boars nor sows should be fed highly. Good store condition should be aimed at, and no more. Before farrowing, sows should have a little better food, in order to stimulate the secretion of milk, and during the whole sixteen weeks should be kept rather improving in condition. They should be allowed to have exercise, and for this purpose nothing is better than a small close field. All pigs ought to be rung; they will keep the better for it, for rooting is hard work.

Sows in low condition often produce the most healthy, and sometimes the largest pigs, but their supply of milk is liable to run short. Sows in high condition generally have weakly pigs, and are certain to destroy some by lying on them. At the time of farrowing, the sows should be put singly in houses fitted for the purpose, with a rail running round the inside to prevent them from crushing the young ones against the walls. Chaff or cut straw should only be given as litter. In long straw the pigs are liable to become entangled before they are strong, and the sow often injures them by lying and treading upon them. In the case of very fat sows, when they are long in farrow, the pigs should be removed as they are born, and returned to her when she is done pigging. But as a rule, the less the sow is interfered with the better, except in cases of malpresentation, when a little help is necessary. For a few days after pigging the sow should not have forcing food. If she is all right at the end of the fourth day, she may be generously fed. Nothing will produce more milk than warm skim milk thickened with a little buckwheat bran. A great deal of the after success of the litter depends upon a plentiful supply of milk at this stage.

At a fortnight old the young pigs should begin to feed, and a small trough should be put for them, and protected from the mother, in which skim milk, mixed with a little scalded corn or buckwheat meal, should be placed. In case of pigs made up for exhibition, they should be induced to take a little new milk at a few days old. It must be remembered that

more than half the breed of a pig goes in at the mouth. And the more generously they are fed, with reason, while young, the easier will they be fattened when wanted. On no account should young pigs be allowed to depend entirely upon their mother's milk after three weeks old. If they have been well fed they will not go back when weaned. It pays to feed all young animals well. Every one knows how long it takes for a young animal to overcome the effects of pinching when young. Pigs may be weaned at from four to eight weeks old. This will depend upon the season and their general condition. The better they have been done to, the sooner may they be weaned; and for some time after weaning they should be fed liberally. No animal takes so kindly to the young of another as a sow. It is often convenient to know this. The only danger is that the sow from whom the pigs are taken may suffer from her milk; but with proper care and attention no bad results need follow. If sows are allowed to farrow too late in the fall, the pigs do not thrive so well in cold weather as they would do if older. Pigs suffer very much from cold. The best months for pigs to come are September and March. September pigs will be a good size and strong before cold weather comes on; and the March ones will come at a time when we must expect it to be warmer, and when there is generally a good supply of milk on dairy farms. On most farms it is difficult to provide warm quarters for winter pigs, and for this reason, if no other, winter litters should be avoided if possible.

I beg also to inclose an article on a disease in sheep that may be interesting to your readers from the *Gardener's Chronicle*.

Also Mr. Hannan's experiments on the best time to cut grain.

I shall forward other articles as I have time.

I may mention that the crop of cabbage I gave you an account of in my last, were not planted till 29th June, and they have been marketed at Yarmouth, for \$1. per dozen.

I am, Sir,

yours respectfully,
W. BUSTIN.

"A somewhat rare disease, not fatal but of a perplexing nature, occurred amongst my ewe flock during last lambing season, the treatment of which, if not understood, might have occasioned me heavy loss. To middle of February lambing has been highly favourable; 300 lambs were dropped in four weeks, with loss of only one ewe and six lambs. This good fortune was of short duration. An eruption, something like boils upon the human skin, appeared upon the udder, tongue, and lips of the ewe, and on the lips, tongue, and gums of the lambs. Within a week upwards of 200 ewes and as many lambs became affected with the disease. Boils formed upon the teats, inflammation extended deep and far about, involving the whole substance of the udder; in milder cases there was one or two small pimples, with redness of surrounding parts; in numerous cases the bag appeared bordering on mortification (black brown in appearance). A black scab enveloped the old teat, which, on falling off, exposed a raw, ragged surface; in one case the teat sloughed away, and the milk escape immediately from the udder. From soreness, the ewe would not allow the lamb to suck, and the imprisoned milk caused garget to attack the udder; and this became more serious than the original disease. Disease extended deep into the