

, 30th. May, 90.

C. E. JOHNSON, ESQR. WARWICK, P. Q.

Dear sir,—Land plaster has an entirely different effect to that of phosphates, and the only way of testing the needs of your soil is to try both; land plaster at the rate of one half barrel per acre, and the various phosphates at the rate of 200 lbs.

Plaster will have no effect on the improvement of grain except peas, tares and *perhaps* corn, but will tell certainly on the grass seeds sown, unless the land be wet.

Hoping this will prove satisfactory, I remain,

Yours truly,
(Signed) E. A. BARNARD.
Sec. Coun. Agr. &c. &c.,

I doubt very much if plaster—sulphate of lime will do any good to other plants than those that bear their seed in pods, such as clover and tares mentioned by Mr. Barnard. It would be worth while trying its effects on alternate rows of corn; but I think there is no doubt that the most efficient chemical manure for that crop would be 200 lbs. of plain superphosphate and 150 lbs. of sulphate of ammonia, added to a half dressing—say, ten tons—of good mixed farmyard dung.

When a purely green growth is desired, as in the case of corn given to cows while in the pastures, the superphosphate might be left out.

A. R. J. F.

THE SILO AND ENSILAGE.

BY M. L'ABBÉ CHARTIER.

Contrary to my usual practice, and although I greatly prefer *speaking*, I shall be obliged, in order to allow more time for the other lecturers, simply to *read* the notes I have made on the different proceedings to be adopted by those who desire to make silage with as much perfection as possible. I suppose that a good deal of explanation will be needed, and if the president will allow me, I will undertake to reply to all the questions I am able to answer.

To begin with, I ask you to be patient; what I am about to read is a discursive sort of essay. I was asked to speak on the progress ensilage has made; now, to treat that question fully, and to lay before you what has been done in it and what is being done to-day, would lead me into too long an address. The subject could not be exhausted in less than an hour or an hour-and-a-half; but I am restricted to thirty minutes. I am about, then, to read you these disconnected notes; they are only some observations I have made.

Four years ago, we began to make ensilage at the Seminary of St. Hyacinthe; I have attended to the business as closely as possible; all the improvements that I thought ought to be made, I have made; and I think we have succeeded tolerably well under, pretty nearly, all sorts of circumstances.

I do not by any means assert that we have arrived at perfection. There are probably in this numerous assembly many people capable of giving you information more learned and probably more exact than that I am about to relate to you, which is absolutely nothing but the result of my own experience.

To talk about ensilage, we must understand three points: 1. the cultivation of the plant to be ensiled; 2. the construction of the silo; and 3. the manner in which it should be filled. I will proceed after the manner of this nomenclature.

As to the plant to be ensiled, I think we are all agreed

that it should be Indian corn, or maize. I do not think there is any other crop that we can grow in the province which will yield as great a bulk as maize will. (1)

Now, how ought maize to be grown. In answer to this question I will try to say as little as possible, because I think most of you know more about it than I do.

Still, there are certain conditions essential to success and when one does not succeed it is a dead loss: nothing pays better than maize when it is a good crop, and nothing makes such poor ensilage when it fails. How shall we proceed so as to insure success? We must have a soil well prepared sufficiently rich, that is as rich as possible. The advantage of this crop is that you cannot over-manure for it. If there is superfluity the maize will take up an immense quantity and the remainder will do no harm; a great many other plants do not do as well when they have too much manure.

And so, you need not fear enriching your soil too much where you are going to sow maize. The piece must be well drained. Maize, when young especially, is very susceptible to moisture. If the piece has not been well drained, the seed often perishes in the ground, and even if it come up, the crop may take a bad turn and never attain its proper bulk.

The land must be thoroughly worked, as perfectly pulverised as possible. To succeed in the cultivation of corn, every chance must be given it in its young state. If the land is badly prepared, if it be full of clods, you delay greatly the growth of the plant, and you run the risk of having many grains that never come up, or that having come up, die; and thus you will have many a gap in your field.

As corn is sown late, you will do well to give one or two stirrings to the land before sowing, so as not to let the soil harden in the sun; drag it with a grubber or harrow it thoroughly in order to prevent it from getting baked, which if it happens to do, it will be very difficult to get it fine again.

As to the way of sowing corn, I believe some people sow it broadcast; but with us, who make ensilage, I think there is no broadcast work practised because we do not care to fail in our undertaking. We therefore sow in rows; until we get more light, I think 20 to 24 inches between the rows is enough.

One thing I wish to draw your attention to: up to the present time, I think we have sown too thick.

From the time we began growing corn, we have every year lessened the quantity of seed, and we find the quality improved, and perhaps, the quality increased a little. At first we sowed a bushel and a-half to the *arpent*; now, only three-quarters of a bushel.

Well, I have almost made up my mind to sow only half a bushel next year, I think that will be enough, and that we shall get as much, if not more, than with three-quarters, or with a bushel, and certainly more than with a bushel and a-half.

As soon as it is sown, roll the corn, to firm the land, and give a chance to every seed to be pressed by the mould so that it may begin to root at once.

Do not wait too long for the first harrowing. If you wish to get your corn properly worked before the weeds give you any trouble, hoe, harrow, grub the land before the weeds appear. When once they show themselves, it is always difficult to destroy them. But, if you stir the land before the weeds are visible, when they have only just germinated, then, you kill part of the germs, and by that alone you destroy a considerable proportion of the weeds that would otherwise grow.

It sometimes happens that the harrowing cannot be done soon enough, and from the moment that it is done after the

(1) My own impression is that two cuts of clover, June and August would be worth more than the maize-crop.