

in northern latitudes, may have a mean temperature sufficiently high to meet the requirements of this cereal; yet the crop may be injured or ruined by a single frost. Hence the limit to its cultivation north is very variable. It will ripen its seed at a lower temperature than Indian corn. The cool summer climate of England brings wheat to great perfection, but fails to ripen maize. It differs also from maize in being able to withstand the severe freezing of winter in northern Asia, Europe and America. Humboldt, in his "Central Asia," names a place where the ground only thaws in summer to the depth of three feet, and mercury is frozen two months in a year, that has nevertheless a continental summer heat (61°) sufficient to give 15 bushels of wheat at the harvest for one of seed sown. It is continental summer heat that carries wheat and corn so far north in North America. Our great lakes equalize our too changeable climate, and thereby promote the growth of wheat and other cereals, of grapes, peaches, pears, apples and other fruits, in a remarkable degree. They absorb solar heat largely when it is in excess, and give it out freely when there is a deficiency. Make the soil on all the territory that surrounds these great lakes, what it ought to be, and its capacity for raising wheat will remind only settlers of the crops once grown in Western New York, Canada and Ohio —

Cor. Country Gentleman.

How to raise Lucerne.

The following valuable communication is from Mr. Richard Gibson, of New York Mills, on the cultivation of that excellent soiling plant, Lucerne:

Respecting the cultivation of Lucerne, I will give you my experience with great pleasure, as I feel convinced that it is a soiling crop which has only to be tried to be more generally grown. It is essentially a soiling crop, being ready to cut in the spring before red clover, and continuing to produce heavy cuttings all through the summer, no matter how hot or dry. Last season, though unusually dry, did not appear to check its growth, as we were able to mow over one portion of a field five times, and another, only seeded last spring was cut four.

There are crops that will yield a greater weight of feed per acre at one cutting—corn, for instance, and which is a crop that Lucerne cannot supplant, as it yields a very heavy weight of green food at that season of the year when most of our dairy farmers are requiring such. But as a soiling crop proper, I know of none that can compare with Lucerne, and one that few farmers can afford to be without. It yields a heavy weight of feed all the summer, of excellent quality, and one that does not require the expense of ploughing and re-seeding after each cutting, nor each year, as by proper management and on suitable soils it will remain profitable five years.

Its relative value, as compared with corn, is decidedly superior, our sheep and cattle not only preferring but "doing" much better on it. In fact, corn with me has not proved a very satisfactory soiling crop—cattle fed on it generally losing flesh—until we have all but given over growing it for that purpose.

"The first hay we have this winter—that is, our calves and sheep prefer, is that a little Lucerne in it. Going on to the hay the other day, I saw a hole cut in it. Inquiring the reason, I ascertained that the shepherd had found where a load or two of hay, with a little Lucerne sprinkled through it, had been mowed away, and that he had been getting it for his sheep, as they ate it better than good clover hay.

A rich, dry soil, with an open porous subsoil, is the most congenial to the growth of Lucerne; but it will succeed well on any soil that will grow red clover to perfection.

The seed may be sown broadcast, or in drills 10 to 12 inches apart. In England we generally followed the latter course, so that after each cutting, or as often as might be necessary, we could run through the horse-hoe, to loosen the soil and destroy weeds, &c., and by these means the crop could be grown successfully ten years. But here I have generally adopted the former plan, sowing from 12 lbs. to 15 lbs. of seed per acre, as early in the spring as the season will permit.

The soil should be thoroughly prepared in the fall, by deep ploughing, and manuring with rich, well-rotted dung, or what would be perhaps better, 30 to 40 bushels of bone dust per acre, there being less liability of having foul seeds introduced, as this is a crop that is easily choked or run out by weeds, &c.

In the spring the soil may be lightened with a two horse cultivator, or scudger, making a fine surface mulch. The latter is essentially necessary to get a good plant. The seed being very small, will only require lightly brushing in.

The after cultivation will consist yearly of a good top dressing of well-rotted dung, in the fall, and harrowing and rolling in the spring.

As I said before, weeds easily choke it; it will therefore be advisable to select a rich piece of soil free of weeds, and sow after some hoe crop, such as roots or potatoes.

The first season will yield a fair crop, but the second, third and fourth will be the best. —*Utica Herald.*

NORWAY OATS—Our American exchanges are beginning to denounce what they now term the "Norway Oats Swindle." The *Gleaner and Telegraph* from the first discouraged the speculation, and the *Prairie Farmer*, which at one time extensively advertised them, now cautions its readers against the most prominent dealers in this baldeaued and marvellous variety of oats.

LIFTING POSTS.—A writer in the *Country Gentleman* tells how posts may be easily lifted from the ground by the use of oxen and a long chain. The chain is put around the post at the base and a stout prop put under it a few feet away and inclined towards the post, then let the oxen draw. There are very few posts so tight in the ground, he says, that they cannot be easily removed by the strength of two stout oxen. In this way, a long line of fence may be removed in a single day. The shape of fields is sometimes greatly improved by a change in the boundary fences, and lanes and cattle yards rendered much more convenient where a removal of the lines can be made. We do not see why a span of horses may not be used in place of the oxen.

Stock Department.

My experience in Keeping Sheep.

My first experience in keeping sheep commenced by a friend giving me one young ewe. She was astray and was known to belong to the giver, but was not thought worth sending a man several miles for, and, consequently, was a gift of but little value. This ewe had two ewe lambs the following season, and a year from that time the three ewes had six lambs, and the following year my flock reached nine ewes and several wether lambs; all lived and did well, and cost very little to keep, and the mother of the whole flock sheared thirteen pounds of wool the first time. When cut off, the fleece was certainly much larger in bulk than the sheep. The wool before shearing nearly swept the ground. It was wonderfully long, and tolerably fine; some of her progeny sheared good fleeces, but nothing like this. I thought this fine, easy, and profitable work, and after some deliberation determined to go into sheep farming on a large scale. My farm was very large, nearly 350 acres cleared. The next summer I bought 339 lambs, mostly ewes, all fat and in good case. Sheep and lambs were high that year; I paid \$2.25 each for them all round. They were delivered to me about the beginning of August. They did exceedingly well for some months, as I had splendid feed for them, and they became quite fat, so much so that I lost several by their getting down on their backs, and being unable to rise, they died before assistance could be rendered. Most of the flock being ewes, and all of a reasonably good sort, I determined to keep them for breeding, and hence refused a good offer for them that fall, whereby I could have made some money. The autumn rains set in early that year, and were very cold, accompanied by snow and sleet storms. The sheep suffered much, having no shelter, and before the middle of November, when plenty of shelter was provided, several showed signs of failing health; still, as food was abundant and the bad weather must then soon be over, I thought little of it. The hard dry frost I felt must soon come, and the sheep cease to be exposed to pitiless rains. I had 150 tons of hay, and meant to keep most of the sheep over the winter. About this time I was advised to buy some bran and shorts, as a great assistant; I bought eight tons, and now my troubles began in earnest. From this time the sheep failed badly, and although fed well and carefully housed, they continued to fail and to look worse instead of better. They had plenty of shed room, about 80 x 30 feet, and a large dry yard to roam about in; still there was a slow but certain decrease in condition; something evidently was wrong. I stopped the bran altogether, as I felt sure that the evil had been accelerated by its use, but continued to feed hay. The sheep began now