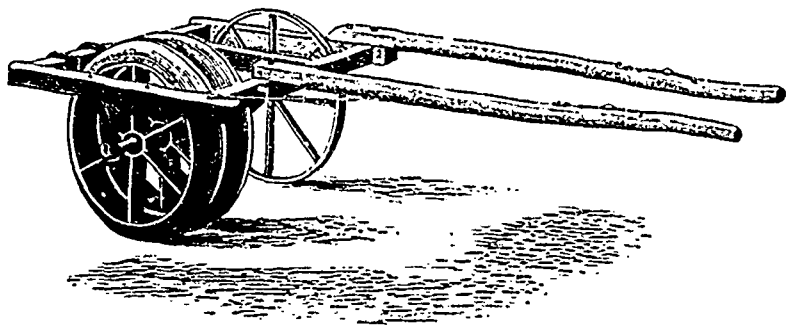


what is a common seedling here, 2 bushels to the arpent, it cannot give a crop. Our seasons are short; the hot sun soon sends the culms up, and there is little or no tillering. Try, if you are a thin sower, a good liberal seedling once in a way, and, our word for it, you will not repent it.

**BARLEY:**—The quality of this grain depends upon uniformity of growth. No barley sown on rough land, ploughed into rounded narrow ridges, can ever be fit for the maltster; the seed that falls on the "brows" of the ridges receive, but shallow covering; the seed that falls on the crowns gets deeper covering: therefore, the two cannot ripen together, and the maltster cannot make good malt out of unequally ripened barley. This grain does not require a firm bed, like



THE PRESSER-ROLLER.

wheat, what it needs, and must have if it is to be perfect, is a homogeneous bed, of the same degree of friability—forgive the two long words—from top to bottom of the furrow. If you have no drill, borrow one, and put in your 9 pecks of 6 rowed, or 10 pecks of the larger-grained 2 rowed barley with it, after having grubbed and harrowed the land to perfection. The rolling, after the grass-seed is sown, will make a fine surface for the mower to work upon.

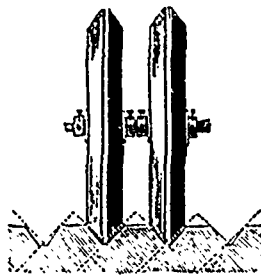
### GRASS LANDS.

Lawns—Rolling—Feeding—Liquid manure.

In Canada, and more especially in the Province of Quebec the grass lands are the most important portion of the farm, and yet the ordinary farmer seems not to pay the attention to them their great importance demands. Stock cannot be profitably kept without a good supply of grass in its various uses: permanent pasture, meadow hay and annual, rotational crop. Not only are our grass lands most valuable for stock, but contribute to the maintenance of the vital quality of the air we breathe: elaborating its grass, and making it wholesome. First, grass lands may be improved by the addition of more suitable herbage plants. We have hitherto been negligent in this particular, and have contented ourselves with sowing, timothy and clover, and trusting to luck for other grasses to grow spontaneously. Now, if we studied well the question as to what our grass land was intended to produce, or what purpose they were intended to serve, whether upland pasture, rotative crop, or meadow, we should have some idea as to the system we must adopt to attain our end. It would be perhaps difficult and expensive to make experiments as to which grasses to sow in the various places we might require them, but a great deal is being done now at the

experimental farm in this direction, and, I would advise the readers of the Journal to keep a sharp look out as to what results are obtained from the different varieties under different circumstances of soil, situation and climate, and to base their operations on what they learn. The reports of the experimental farm are free to all who write for them (you need not even pay postage on your application for one provided it contains no other matter.) In my last article, as to grass being winter killed, I notice you ask Mr. Editor, why do not the lawns on Sherbrooke St., suffer from exposure and short clipping on the autumn? My idea is that the conditions are not the same as the open fields of the country. The grasses of which they are composed are of a more permanent and hardy quality,

not see any diminution in the yield. I am therefore forced to the conclusion that under the condition of climate we have to encounter, this question of not grazing or grazing our meadows is one, from a strictly economic standpoint, of great importance. I wish some of your readers would give us the benefit of their opinion and experience. An old English writer says: "All grasses abhor a wet bottom and will not root in it deep enough to bear the changes of the climate, and not increasing by the roots as they ought to do, will die when they have perfected their seed, and leave the land bare." The meadows should be depastured but very slightly and heavily rolled in the early spring—"and further," grass lands if thus properly managed will



(1) they are close together, so that their roots are protected by the thick soil formed above them—then, continual clipping by the mower causes them to stool and ticken. (2) The gardens of the City are less exposed to the action of the intense cold than are those in the country, where the wind has a clean sweep sometimes for miles. Again, cutting it smoothly with the lawn mower is very different to grazing with cattle, the former presses the roots more firmly into the soil, and the latter tear up the roots of the less strong rooting kinds, and leave them exposed to the cold at a time when the roller would be of no use to press them into the firm position in the soil—so essential to their growth.

The roller is of course of great value, and should always be used as soon as it is possible to go on to the meadow in the spring, but the mischief, I apprehend, will have been caused to the lifted roots before this will be possible. My opinion, that, in this climate at least, keeping the stock off the meadows is the safest plan to ensure a good hay crop the succeeding year, is strengthened by observation. I saw meadows last year with only a small space between, and the land, a sandy loam, could not much vary. One had not had the after-grass removed, either by cutting or grazing, the year previous, and the hay crop was a good average one, the other had been grazed down to the utmost limit and the crop was not worth gathering. (3) I was speaking to a farmer on this subject, in the western part of Bromo County, and he told me that he had a meadow which he had mown twenty four years in succession and had never used any manure except its own aftergrass, and he could

(1) Then why not sow grasses of a permanent and hardy quality in the fields.—Ed.

(2) Exactly our idea expressed twenty times in the Journal.—Ed.

(3) A timothy meadow, we presume, and the feeding off had torn up the roots as usual.—Ed.

maintain their fertility during an indefinite period without any costly appliance of manure." When the resources of a farm are incompetent to yield more than an ordinary amount of winter forage, extra enclosures should be planted to guard against any damage caused by severe frost or extreme and continued drought." By this means, every acre of a farm may be made profitable, and this is the true principle of comprehensive economy.

Of course all this applies to what we may call naturally rich grass land, but there is a good deal seeded down to grass which does not come with this category and will require manure at least occasionally. On such land too much care cannot be taken to have it in good condition before seeding down by the addition of lime, wood-ashes, or marl, if the land is tight and sandy, or peat muck if too retentive. Also by seeing that, before the seed is put in, the land has been thoroughly cleared of all obstructions to its growth, brush, stones, weeds, and all inequalities of surface. Top dressing with manure is most essential to success on thin poor soils. Liquid manure can be used with great advantage, the liquid manure cart is not popular enough with our graziers; a quantity of the very best manure value is lost on every farm, and its application is quick and easy when you have the tools: a pump, and a barrel set on wheels behind which is a long box perforated with small auger holes. The first year's increase of crop on a few acres will pay for these. Some will say, "Oh we cannot afford all these appliances," and at same time will think that a handsome buggy is a necessity. There is no necessity to build an expensive liquid manure tank, a well, lined with clay, in the lowest corner of the yard will answer the purpose. But we ought to be continually on the look out how we can increase our stock of solid matter for top dressings. There are, on every farm, continually accumulating, quantities of rubbish which might be made into good fertilizing material, and spare hours, when these could be

drawn into a heap and rotted down, No time could be better employed than in laying up a stock of what will some day add to our income however small it may be. Pastoral farming is that suited to this part of Canada, and to that we must turn our first attention, studying all the time how we can most economically keep our stocks of all the domestic animals in the best possible condition to yield us a due and ample return for the care and labour we bestow upon them. And we may be assured that our success will be commensurate with this care and attention.

G. MOORE.

### PEANUT CULTURE.

(by Mr. John Craig, Experimental Farm Ottawa.)

Ottawa, March, 15th., 1897.

An article on the culture of this plant in Canada has for some time past been going the rounds of Canadian newspapers. In this article, successful peanut culture in Eastern Ontario was set forth as a glowing possibility; nay, more, as an assured fact based upon the results said to have been obtained from a single experiment! I do not wish to discredit in any way the work of this particular experimenter—such private work is laudable,—but, at the same time I would urge farmers to look into the situation somewhat carefully, in order to consider it in all its bearings, before engaging to any extent in the industry. This is a wise plan of action before taking up any new line of rural labour.

### HABITAT.

It appears more than probable that to Brazil we are indebted for the peanut, in addition to three other plants of great economic importance, viz., cotton, corn and potatoes. Two of these (corn and potatoes) we cultivate with success throughout all the agricultural districts of Canada. Cotton belongs to the milder parts of the temperate region and is a companion of the sugarcane and the peanut. (1) Virginia, North Carolina, and Tennessee produce a large part of the peanut crop of the United States. Its foreign cultivation extends throughout Brazil, India and Africa. Its most successful cultivation lies between the parallels of 36 degrees and 37½ degrees North latitude. It is grown to a considerable extent however as far North as the 40th. parallel.

### CLIMATE REQUIRED.

Authorities on the cultivation of this plant say that in order to make a commercial success of growing it, a climate ensuring a season of five months freedom from frost is necessary. Peanuts may, also be successfully produced, in an amateur way, in many localities where they cannot be made to pay. Just as early varieties of grapes may be grown for home use throughout Eastern Ontario and Western Quebec by the exercise of judgment and skill, though they cannot compete with the Western and Southern grapes in the matter of quality, nor can they be grown profitably at the present time, so may peanuts be grown in favourable seasons in the same localities, as garden curiosities, with the exercise of extraordinary care. Peanut culture in the United States was an exceedingly profitable industry in Virginia, Tennessee, North Carolina,

(1) Farmers' Bulletin No. 25. U. S., Dep. of Agr.