



"TROUBLE IN THE AIR."

Colonists at Saskatoon demanding their baggage. Rev. Mr. Barr addresses them.

Farm.

Green Manuring vs. Bare Fallow.

There will be no bare summer-fallow at the Brandon Experimental Farm this year. The portion, some 18 acres, that customarily would have been fallowed, this year will, instead, be sown with peas, which will be plowed under as they come out in bloom. This plan will enrich the soil, for the leguminous family of which the pea is a member is noted for its power of adding nitrogen to the soil, especially when turned under as green manure. Weeds can be killed by this means almost if not quite as well as in the bare fallow, for extra cultivation can be given ere the crop is sown, there being no need to rush it in early; then the plowing when in bloom prevents the maturing of weed seeds, and the long fall after gives a splendid opportunity of killing any fresh supply of weeds that will start to grow. Another advantage, the growing crop uses much of the plant food that would otherwise be wasted through nitrification during the hot months, and this is all returned to the soil when the plants are plowed under. A growing crop through shading the soil generally prevents it from baking to the same extent that it otherwise would, so that the mechanical condition of tilth is improved, which is another strong feature in favor of green manuring versus bare fallow. The amount of water which the growing crop has drawn from the soil up to time of blossom rarely surpasses the amount which would have evaporated had the land been left bare, for the shade the crop gives largely counterbalances the amount required to build up its tissue.

Prairie Breaking.

Ere this article appears, spring plowing and seeding will be completed on most farms, and where breaking is to be done, preparations will be under way for commencing this initiatory part of farm cultivation.

When open, clean prairie is to be broken, it can be done with almost as little expense as plowing stubble. Such land should be plowed as lightly as possible, and the furrows not more than ten to twelve inches wide. The best plow for this kind of breaking is a long-handled, mould-board plow, with straight coulter fixed to the share, as with an ordinary breaking plow. Such a plow is easier in draft and lighter to handle than the breaker, and in such land is sufficiently heavy and stable to do all that will be required of it. In fact, such land is often broken with a double gang plow and backset with an ordinary walking plow. In backsetting, a fair amount of fresh mould should be turned over with the sod, from five to six inches deep. The sod should be in a forward condition of decay, and the combination of sod and mould will make a splendid surface seed-bed, needing only the disk and tine harrows to make it ready for seeding in early spring.

Breaking tough, weedy prairie or scrubby land is a job of more magnitude, requiring a heavier plow and a deeper furrow. When the scrub is heavy it should be cut down with the axe and

burnt before the plow reaches it. Willow and poplar bluffs should be rooted out with a team and logging chain. This will be found to be a more expeditious and thorough method than plowing up the solid roots, for pulling out leaves the roots broken, making it comparatively an easy matter for the plow to get through them. In plowing such land we must give up all idea of backsetting, for to get below the scrub roots we must at least plow six inches deep, and in some cases it will be found necessary to plow a good deal deeper. To hold down the standing scrub while the furrow is being turned, a logging chain with a heavy weight attached will be found highly serviceable.

Breaking rough land should be done thoroughly, for it is much easier to plow out all the roots with the heavy breaking plow than to encounter even an occasional one afterwards, when armed only with the gang or walking plow.

JOHN McBEAN.

Sow Some Rape.

It will pay every farmer in Manitoba and the Territories who keeps sheep or hogs, or who intends fattening a bunch of steers next fall, to sow a few acres of rape this summer. Several farmers have already given it a trial, with excellent results, and there is no doubt if its merits were more generally known that it would be better appreciated. At the annual stock-breeders' convention in Winnipeg in February last, Prof. Grisdale said that at the Experimental Farm, Ottawa, it had produced the cheapest bacon of anything they had grown.

For sheep or hogs it is usually pastured in the fall, and when such is desired sowing need not take place until the first week in July, but for summer pasture for hogs the seed may be sown any time in spring, when danger of frost is over, and pastured while young, as it will spring up again when eaten down. Hogs feed principally upon the leaves, while sheep prefer the more mature stalks and fatten rapidly on them.

An ideal seed-bed for rape is one that has been well cultivated the previous summer and is in the best condition for root growing; but most seasons a good crop may be had by the spring preparation of stubble or sod. In both cases the land should be rolled and harrowed immediately after plowing, so that the moisture may be retained. A fair crop may be grown on clean land by sowing broadcast from four to five pounds seed per acre, and covering with a light harrow; but the best crops are grown by sowing in drills, as turnip seed is sown, and cultivated with the horse hoe. When done in this way, one or two pounds of seed per acre is sufficient.

The seed may also be sown in drills on the level, with the grass-seed attachment of the grain drill, by closing part of the openings and sloping the rubber tubes into the shields of two or three of the hoes. The rows in this case will, with the ordinary drill, be only about 21 inches apart, which is too narrow to work a horse hoe to the best advantage, but if worked narrow at first to

keep down weeds until the rape gets a start a good purpose will be served.

Half-Done Work is Always Wasteful.

The extravagance and waste of doing work badly are most lamentable. We can never over-estimate the value, in a successful life, of an early formed habit of doing everything to a finish, and thus relieving ourselves of the necessity of doing things more than once. Oh, the waste in half-done, careless, patched work!

The extravagance and loss resulting from a slipshod education is almost beyond computation. To be under the necessity, all through one's life, of patching up, of having to do over again, half-done and botched work, is not only a source of terrible waste, but the subsequent loss of self-respect and life is also very great.

There is great economy in putting the highest possible personal investment in everything we do. Any thoroughness of effort which raises personal power to a higher value is a judicious expenditure of individual effort. Do not be afraid to show thoroughness in whatever you undertake. Thoroughness is a great quality when once mastered. It makes all work easier and brings to life more sunshine.—[Success.]

Our Russian Competitor.

Correspondents of the "Farmer's Advocate" have raised the question of the ultimate supremacy of Canada or Russia in supplying foods to Great Britain. Any information shedding light on so important a subject is, therefore, of value in these days of hot trade competition. Asiatic Russia or Siberia has been comparatively little known to the general public, except as a land of mysterious dungeons for Nihilists, wolf-hunted sleighs and miscellaneous horrors. John W. Fraser, a trained English journalist, with eyes wide open, gives us a new view in his book, "The Real Siberia," describing honestly what he saw in a leisurely tour-through the vast country in 1901. He tersely calls it the Canada of the eastern world.

The construction of the Trans-Siberian Railway, 5,449 miles long, at a cost of some \$400,000,000, has drawn aside the curtain on a country three and a half times as large as all Europe. The first sod was turned in 1891, and in 1900 a million and a half passengers were carried. The original design was military, but immigration, commerce and Siberian development came as an afterthought. Passengers are carried at about a shilling fare per hundred miles. First-class fare on the Siberian Express for the entire journey is just a trifle over £8, and second-class, which is nearly as good, about £5. By boat from London, Eng., to Shanghai takes 36 days, and costs from £68 to £95; but by the Moscow-Vladivostok rail route you can go in 16 days, first-class for £33 10s.; second-class, £21; or third-class, the whole 8,000 miles, for just £13 10s. We presume that freight rates are correspondingly favorable.

Russia is putting forth Herculean efforts to induce immigration. For the first three years no immigrant is called upon to pay taxes. Liberal land grants are made, and additional land can be purchased near the large towns at prices ranging

GETTING READY TO STRIKE CAMP.
150 miles of trail before the colonists, Saskatoon, Sask.