evaporation. Thus the whole system is one of moisture conserving and exceptionally gratifying results have followed its adoption in the dry districts of the Central States and also in Western Canada. Wherever summer fallowing has been carefully carried on a sufficient supply of moisture is saved up for several seasons.

As for the states mentioned both kinds of farming is carried on. There are local conditions affecting the moisture supply of crops so that in some parts of a state irrigation is necessary while in others it is not.

Clover for Poor Soil

"Will it pay me to sow with my grain crop a pound or two per acre of red clover and plow the clover under in fall as a fertilizer?"

When sown with a nurse crop of grain and the grain is allowed to ripen, the clover usually makes a very poor growth and there is very little of it to plow down in the fall.

If you wish to fertilize your soil with clover, sow about 12 pounds of common red clover seed on spring plowed stubble, harrow well, then when the weeds and volunteer crop is about a foot or two high run the mower over the land and leave the cuttings on the ground. The clover will soon make a large plant and by the end of August or beginning of September you will have a lot of clover to plow under, and the land will be greatly enriched.

M. A. C. S. A. BEDFORD.

An Advocate of Inoculation

EDITOR FARMER'S ADVOCATE:

For the department of agriculture for Saskatchewan, working through the agricultural society, I undertook to sow a quarter of an acre with alfalfa in the spring of 1907. The land selected was a piece that had been under cultivation for fourteen years, and this was the second crop after summer fallow. On 20th May I ploughed and harrowed the plot, harrowing it again in about ten days. On account of not receiving the seed I did not get the plot sown until the 21st of June. One-half of seed was treated with nitro culture, the other half sown without any treatment. It was sown with grain drill. On 3rd August, when the growth was about twelve inches high, I run the mower over the plot to clip off the weeds. At freeze-up the treated plot had reached a height of eleven inches, the untreated about eight inches. In the spring of 1908, the treated plot came right along. On August 24th I cut and weighed the crop off two yards square of each plot. That of treated weighed twenty pounds and that of the untreated, three pounds. Both crops were cut the same day. The roots of the treated plot were deep and strong and well supplied with nodules, while those of the untreated, although going well into the ground, were very fine and no nodules were found on them.

Sask. JAMES SMITH.

Field Peas As a Crop

What is the value of field peas as a farm crop in Western Canada? On what kind of soil do they thrive best? About what date should they be sown? What rate of seeding per acre gives best results? What time do they require to reach maturity? What yield do they give per acre?

Field peas are scarcely appreciated at their full value by the Western farmer, this is largely owing to the very general impression that they are not a success as a field crop, and partially to the practice of adopting Ontario methods of harvesting unsuitable for the West.

The sample of peas grown here are not equalled in any other part of America, they are practically free from injury by pea weevil, mould, etc., and always weigh over the standard weight. The yield is also large, averaging at least 25 per cent. more than that of Ontario and 50 per cent. more than Nova Scotia.

They thrive best on a stiff clay loam but will succeed on any good wheat land, and require less heat than wheat, for that reason some of the land too cold and backward for wheat should give good returns of peas, field peas are hardy and should be sown not later than the second week of wheat seeding. Late sowing encourages mildew, which reduces the yield. Use two and one-half bushels of seed for small kinds, like Golden Vine, and three bushels of large varieties like White Marrowfat. Peas take about 130 days to mature in Manitoba, but ripen somewhat earlier in Saskatchewan, reversing the order of other grains which usually mature quicker in Manitoba than in the more Western provinces.

The average yield of peas on Brandon Experimental Farm is about 50 bushels per acre, and at Indian Head about 48 bushels, this is on carefully prepared summer fallow. Thirty-five bushels an acre should be grown by the careful farmer on well prepared summer fallow.

M. A.C. S. A. BEDFORD.

An Unusual Method of Growing Clover but Successful

EDITOR FARMER'S ADVOCATE:

I am not going to relate my own experience in clover growing but will describe how it was successfully grown on an adjoining farm. As the method of growing it was somewhat different from anything I have tried or read of, it may be of some interest to your readers. The land selected was a thirty-acre field of black loam, level, inclined to be damp, had passed its usefulness for wheat growing and was not very clean. This land was plowed in the latter part of June, having grown a crop of wheat the year previous, and had simply lain in stubble since the wheat was cut. No effort was made to conserve the moisture. It was plowed in a very hot, dry time, and was harrowed four times, twice lengthways and twice across. In the first week in July the field was seeded with a mixture of five pounds of timothy, two pounds of alsike and one pound of red clover to the acre. The seed was sown with an ordinary grass seeder. It was harrowed once after seeding. At freezing-up time that year, this was about as neglected a looking field as anyone would care to look at. The oats and other weeds, though not thick, covered it pretty well all over, and were about two feet high. The following year about haying time, it was not much more promising in appearance. The crop was allowed to ripen, cut in August, raked up right after the mower and stacked. The timothy had shed nearly all its seed but I do not think the clover shelled much. The following year, on this field, there was a splendid crop. The clover seemed to be twined round the timothy. It was what you would say, as thick as it could grow. Again it was allowed to get what would be called too ripe to make first class hay. The year following though not a very favorable one, there was nearly as good a crop, and that fall the clover came up thick and strong. To one who did not see these crops grow it may seem an expensive process but to that man the satisfaction of seeing his clover a real success must have repaid him and there is no doubt when wheat is grown there again it will repay him more than satisfaction.

Man. H.

Some Suggestions on Training a Dog

EDITOR FARMER'S ADVOCATE:

In your issue of April 14th, I noticed several letters on the training of the farm dog, and as none of the suggestions offered come up to my ideals of training a dog for use on the farm, I thought I would add a few ideas, in the hope that they may be of some benefit to those of your readers desirous of training a young dog, though I do not pose as a professional dog trainer, by any means.

Having chosen the pup of our fancy, my preference being one of good Scotch Collie breed (we will name him Jack in this letter) the first thing necessary is to gain Jack's confidence by becoming his friend and master, without either fooling with him or abusing him. Never forget to feed the pup after you have had your own meal, always calling him by name, and in that way keep on until he thinks more of you than anyone else. Then and not till then are you in a position to teach him anything. Then begin at the a, b, c of it. Teach him some simple little tricks. This I think necessary for two reasons, first, to teach him while young to obey command, and, second to develop the instinct of the dog. The tricks may be of your own choosing. One very simple one is to teach him to jump through the hoop, i, e, take a hoop and hold it on edge on the floor. Now take a morsel of meat, hold it on opposite side the hoop from Jack. If he goes through say, "good dog" and give him the reward, but if he goes around the hoop, take away both meat and hoop. In a few seconds try it again. After he goes through a few times and gets both petted and fed, you can raise the hoop and he will jump through. Teach him about half a dozen tricks and put him through them once a day, always taking the tricks in the same order till he gets to know them thoroughly.

When the pup is three months old teach him to lead, so that he will not be afraid of the line when he comes to training for cattle. Always make him walk behind you. When he is ten months old we will give him his first lesson on cattle. Get 100 feet of cord, take him to the field and you will now find the benefit of having taught him a few tricks when small. He will learn a new command more readily and he will understand your word of approval or disapproval, which should be the same all the way through. Never allow another dog near the pup while training. Just be the "old dog" yourself, and if you have trained him properly until now, you can teach him more than any dog can.

If the dog should ever require correction, other than the word of disapproval used for that purpose, great care must be taken in punishing not to spoil the dog. Always have a firm hold on him and then repeat the command he has disobeyed. Strike him at the same time lightly, and every time you strike repeat the command, more softly each time until you are just touching him, and repeating command kindly till he wags his tail. Then let him go and try him at the same work again. Repeat the command sharply without showing temper, and he will almost certainly obey. Then use the word of approval and you have gained the dog. In training a dog for cattle, while still using the line, he must be taught to drive easy or hard, as you may wish. Words with proper significance must be used in commanding him, such as "easy now," "easy" and "come down on 'em," or "drive hard," etc.

A very valuable quality in a dog, is to understand being sent to the back field for the cows, and if the dog has been properly line-broken, and is now working well without line, this can easily be taught by going with him, and at first send the dog say 20 rods, or so, and see that he does his work right. Then increase the distance according to the way the dog works and in a short time you can stay at home and send him, but don't forget the word of approval if he does his work well. If the dog should ever have the misfortune to get kicked, get to him as quickly as possible, sit down on the ground, and if you know where he was hit, rub the part with both hands for a while, and in that way get him to think as lightly of it as possible, then put the line on him and go after the beast that kicked him, using the word for hard driving, and help the dog. If he draws blood so much the better. Retaliation may not be commendable in a man, but it is one of the best virtues a dog can have.

Last, a word on the system of feeding a dog: I think more people make a mistake here, than at any other point. How often we see a piece of bread thrown out to the dog, and on butchering day see odds and ends of meat scraps thrown to him. This I consider a great mistake. Feed the dog well three times a day, at the same place, and let him have a dish of his own and teach him to sit up while you prepare his food, and wait till you tell him to take it. Then when you come to teach him to watch a pail of milk without sampling it, or a pig which you have just slaughtered and want to let cool, you will find the advantage of a proper feeding system. In conclusion when you bring home the pup, whatever you desire in the dog at two years old keep working toward that end all the way through and always make use of what the dog already knows to teach him what he doesn't.

Man. JAS. W. MCQUAY.

Cost of Protection to the Farmer

There are three ways in which the present system of protection works harm to the Canadian farmer. First, it increases the cost of almost everything he must buy, with no corresponding increase in the price of what he has to sell. Second, it increases the cost of living of everyone he employs, directly or indirectly, and hence the price he must pay for their services. Third, by unduly increasing the profits of manufacturers, it places them in a position to compete unfairly with the farmer in the labor market. These effects of protection are far-reaching, and together constitute an almost fatal handicap to the farmer in his race with other Canadian industries.

Canada is an agricultural country, and, unless our immense agricultural resources are wasted enormously, or our farming population ruined, agricultural products must, for a very long time, form our staple of exports. For this reason, it is a matter of common experience that the prices received here for farm products depend almost entirely upon the export trade. Prices are fixed abroad, and our protective tariff is totally powerless to raise them. On the other hand, ours is not essentially a manufacturing country. It is true we have many advantages in this line, and, unquestionably, certain lines of manufacture can be carried on here better than elsewhere, because of a supply of raw material, or some other advantage. But the chief element conducive to manufactures is not present—a thickly-populated country. Hence we find that we are very large importers of manufactured goods. From this, we would expect to find that protection is afforded to those industries to the full extent of the tariff. This is most surely the case. I have talked with many importers of merchandise, and I find the general opinion that goods of foreign make can be brought as cheaply, after paying the duty, as goods of home manufacture.

The effect of this on the farmer is considerable. Everything he buys is raised in price by nearly thirty cents on the dollar. When the Tariff Commission sat in Toronto, the receipts and expenditures of an average Ontario farm were laid before them. From these it was computed that, in this particular case, $135 was paid in the year as the cost of protection to our manufacturers. This was, I think, a typical average farm; and, while these figures would be wide of the mark in many cases, it is safe to say that the average farmer pays more in the tariff tax than in all other taxes combined. We must remember, too, that only a small proportion of this goes into our Federal coffers. By far the larger portion is paid as a bonus to our manufacturers. This in itself is a serious burden, if there were no others involved.

But the farmer must also, in very large measure, pay the tariff tax for the other classes by whom he is served. The doctor, the lawyer, the clergyman, the tradesman, the laborer—all find their living expenses increased as the result of the tariff. They must charge more for their services if they are to live. In the end, all this increased living

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EDITOR FARMER'S AD

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