

THE PROPER PLACE.

It is a generally-acknowledged fact that the immediate result of the application of stable manure is an increased yield of root and stalk, and subsequently, after a more thorough assimilation with the soil, an increase in the seed yield may be looked for. Thus, the potato ground and other root crops should receive a liberal dressing. The potato ground is a very suitable place for any strawy manure, for here it may be plowed under. For the most part, on the general run of farms, these plots are not very extensive, hence they are quickly disposed of. Next to be considered, but first in importance, comes the corn ground. From no other forage plant in common use can such large returns per acre be obtained as from corn. Since this is the case, and the possibilities of a large crop are great, every effort should be put forth to secure the same. Moreover, as the yield is great, the demands on the soil are naturally in proportion, and, finally, as experience has shown that the liberal use of stable manure gives better results here than anywhere else, this crop should receive the major portion of the year's droppings. Again, mostly all the weed seeds will, if the method hereafter outlined be followed, germinate, and the cultivation of the corn will kill them; also, the rows of corn offer a grand opportunity to pull the few the cultivator misses. This is where your inquirer should put his manure. In connection with this, the silo falls naturally in line, for there is the most convenient, easiest and most economical way of harvesting and housing the quantity of corn that every farmer should grow. In addition, the area under corn should be further increased by a piece grown thickly for autumn feeding, pending the growth or the absence of the aftergrass; and this, not only to feed his cattle well, but to enable him to handle a large enough field of corn to insure a proper rotation of fields to be fertilized. After the corn comes a grain crop on the clean field, seeded down with clover and timothy. The grain will produce more bushels per acre, of better quality (heavier), and the clover seed more likely to catch, thanks to the previous manuring. Thus, you have three seasons' crop directly benefited by the one application.

Where no corn is grown, top-dressing of the meadows, especially the newly-seeded clover, is the next best, and this has several points of merit to commend it to our attention. For instance, in the fall, after the ground is just slightly frozen, a wide-tired wagon can draw a considerable load much more easily over the meadows than on the plowed ground. This fall dressing is especially advantageous to the clover when the snowfall is insufficient to cover and protect, as occurred during the season of 1906-07. During the summer, parts of a field that for some reason do not respond as well as others may be touched up by the cleanings of the cow stable or the scrapings of the yards and pens. There are some who advocate the dressing of the grain fields, but the writer feels that the returns are not sufficient to justify this when so much greater returns and as great permanent benefit can be obtained from the methods previously mapped out.

THE PROPER TIME AND METHOD.

Undoubtedly, the manure spreader and a covered, cement-bottomed bin, in conjunction with plenty of available help at the required time, is the ideal condition. There are but few who are thus favored, so another plan or plans may be outlined whereby the loss of fertilizing constituents will be but slight, and the conditions more generally favorable. During the winter, when, as a rule, the majority of farmers have more leisure than in the other three seasons, is the time. Then, every reasonably favorable day, the wagon or sleigh may be run into or up to the stable, and thence drawn to the field and spread at once. The Central Experimental Farm recommends placing in heaps, but this, though to be commended as being more economical as regards the manure, requires spreading again in the spring at a most inopportune time, when help is scarce, other work pressing, and the job likely to be hastily and inefficiently done, and often seriously retarded by the lower layers being frozen, the additional cost thus entailed being greater than the fertilizer lost by spreading on the snow.

Now, some days being stormy, or the ground too soft, a small, covered, tight-bottomed bin, adjacent to the stable and the road to the field, will be found to fit in well with the above-mentioned plan. This bin will hold some few weeks' manure, if necessary, and, refuse of the horse and cow stable being mixed, the frost will not harden the contents to any great extent. Then, when the weather becomes favorable, the rig can be drawn alongside, after coming out of the stable, and the load topped-off from the bin, and thus, without making additional trips, it will soon be empty. When the sleigh is in use, the bin answers another purpose. The cement or wood floors of the sleigh run hard, and a good stout team will draw twice what they can start off the snow. The bin is then used for storing, and there, again, the bin can be used for expediting the amount of manure spread.

Now, some may say that this all applies to placing the manure on or near the top of the soil. That is where the writer has found it to be the most beneficial. It will go down quickly enough, and the plowing in (except the shallow turning under, as done by the gang-plow, of strawy manure that is inconvenient on top) will soon be like very deep cultivation, a thing of the past. This drawing out in winter is much lighter on the horses, and saves them considerable labor at other seasons when the tendency is to overwork them. It is especially favorable where there are brood mares, provided that they are judiciously handled. The snow-covered fields are easy on the rig, and fields difficult of access are then more conveniently reached. When necessary to clean out, and the snow deep, with no prospects of abating in a short time, a steady, unshod team can be run out to break the track, and thus persist in the good work; while, if the weather looks stormy, a small, high pile may be left as a mark in the field, so that, after the snow is over, the right place to start can be easily found.

Of all the various jobs on a farm, the spreading is one that should not be relegated to a careless or negligent man. Having decided how heavy a dressing can be spared, or is necessary, start the field at the nearest corner, and, taking a land or two, according to width, at a time, go along, shaking out the lumps and spreading evenly over every spot. Don't send an untutored lad out, and then never go near the field; go with him and show him how to do it, and then visit the field at short intervals to see that it is done right. Fields can be done so that one cannot tell where the wagon started and where it left off. This is the great point wherein the spreader excels, but it may be done without. If in doubt about the lumps, a harrow run over in the spring will materially aid the job, more especially if on the meadow.

SUNDRY POINTERS.

A low, wide-tired wagon will be found much more convenient for spreading than anything else, and a covered, shaded shed alongside the manure bin a convenient and good spot for it when not in use. The addition of an old seat off some discarded machine, and a crossed stick to wrap the lines about when spreading will be found to expedite operations. Should one be making a new box, leave the bottom projecting enough in front to stand on while a space is being emptied. These and other details will make the spreading handier for oneself, and, if men are hired, enable them to get through more in a day. It will be found that the easier and more convenient any work like this can be made, the greater the possibilities are that it will be well and promptly done. Bob-sleighs will be found better in winter than the ordinary long sleigh, as they are easier to start off the floor, and the box is generally longer and lower. The box off the wagon is, on the writer's place, just transferred to the sleighs, and thus kept in commission on the one job the year around. Where the doors or the arrangements of the stables do not permit of the entry of a rig, the manure might better be wheeled right onto it than into an uncovered pile, and, "for the land's sake," do not neglect any opportunity to rearrange the stable. In view of the barn-plan essays, this suggestion might not come amiss. The word stable does not necessarily apply only to cow-byres, but includes the horse barns, the pigpens, henneries, and all other housings; and many people, otherwise careful about the cows and horses, seem to forget this. The pig, sheep and hen droppings are very rich in fertilizer, and should be most carefully attended to. Mixing in the bin before spreading along with the others, is suggested as being the most favorable for even distribution. The pigpen is very often the neglected spot, and, considering the highly-concentrated feed usually given, the loss in rich fertilizer is proportionately great. While cattle are the main source of the manure, good management can easily double, possibly treble, the amount. There are but few farms where the remains of old straw-stacks cannot be seen. Instead, had the straw been placed in lofts, or any available mows, or drawn out of the stack and run through a blower shortly after threshing—which is a very handy way—then, had everything been bedded generously, so that the liquid manure would be absorbed, the increase in manure would be something immense. Often a stack could be bought for next to nothing, especially wheat straw, that does not make very acceptable forage, and no such opportunity should be missed. Here the pigpen comes in again, for, if the straw is long, it will soon be shortened and made into most excellent manure; it is then easier to handle, and can be spread over a much larger area, with as good results as lower-grade manure. The barn-floor sweepings may be utilized for absorbing the moisture in any very damp spot, and should be placed right on top and cultivated, so the seeds will immediately germinate. Many people realize their own deficiencies and shortcomings (nearly everybody sees his neighbor's), and start the year with good resolutions. Now, this is one thing to amend. If determin-

ing to improve your horses or cattle, it will cost something to buy mares or a good sire for the herd. Building is now very expensive and labor dear, but here is something that does not cost one cent for initial outlay, and returns may be seen in six months' time. And the increased returns are large; ten per cent. is the least to be expected; the probabilities are twenty-five, and the possibilities one hundred. Once undertaken, it should never be let up on. Everlastingly keeping at it year after year is the secret of success. Granted that at times the temptation is great to neglect some very inconvenient field, or, when hurried, to throw the manure near the barns, then one must be "strong in the faith," and not "yielding to the flesh," run it out to the proper place in the rotation. To any doubter, the author can give his positive assurance that the strict attention to details has doubled the crop on this farm in the five years since it was bought, and has enabled him to maintain an increased stock on the 1907 crop and have a surplus—something which but few in this township can do. LIMESTONIAN.

Frontenac Co., Ont.

EXPERIENCE WITH CEMENT-CONCRETE BLOCKS

In view of the increasing use of cement-concrete blocks for private and public buildings, we feel sure that many of our readers would appreciate a few specific instructions from those who have had experience in manufacturing and using them. Replies to the following questions are invited:

1. Comparison of hollow blocks with solid walls, as to strength and serviceability.
2. Preferable size and style of block.
3. Character of sand or gravel and cement to use.
4. Proportions and manner of mixing, including quantity of water.
5. Packing in moulds, and time to be left therein.
6. Drying and storing, with any other practical suggestions you would offer in order to make blocks of best appearance and quality.

GASOLINE-ENGINE EXPERIENCE.

Editor "The Farmer's Advocate":

In your January 9th issue I noticed an inquiry as to farm power, and, as we use a 9 h.-p. gasoline engine, I will give our experience. Our engine is set in the north-east corner of barn, and is cooled by water from a tank holding about two barrels. The gasoline tank is in the ground, about thirty feet from barn, and is connected by a half-inch pipe.

By means of a horizontal shaft, about 35 feet, we run our root pulper, and, about half way, a vertical shaft runs a swinging jack, and with this we drive grinder and cutting box. We also pump all our water into tank with engine while we are cutting straw or grinding, and do not have to run it separately.

I notice, in your February 13th issue, J. H. M. takes from five to ten minutes to start his engine. Our invariably starts at the second turn of wheel, after gasoline has been pumped up, even in extremely cold weather. E. DAVIES.

York Co., Ont.

THE IMMIGRANT IN CANADA.

Editor "The Farmer's Advocate":

I have read a lot of news in your valuable paper regarding Canadian and English immigrants. I have been thinking that the Canadian is too quick in regard to the English immigrant. Speaking for myself, I came out here right from the City of London, Eng., and never saw a cow or pig before I reached here, so I was pretty green. That was four years ago this spring. Now I am earning \$21 a month and my board, and the farmer is well satisfied with me. I am nearly twenty years of age, and I would challenge any Canadian of my age for all-round work. I can milk on an average 10 cows an hour, giving a dairy pail of milk each, and can pitch hay as well as any man, or get a field ready for seeding; and what's more, I can plow as straight as any old farmer. I am one of many, and the English around here are all first-class as farmers. I heard one farmer here say he would rather have an Englishman than three Canadians. I asked him the reason, and he said the Canadian boy will work for a while, say two months, and then say, "I guess I'll quit." He wants to go to town, and have a good time. When his money is gone, he will hire with another, and then quit. He is not particular if you are in harvest; it does not make any difference. But our English boys will hire, and stay their time out. Of course, there are some who will shirk work. Those are of no use here, and ought to be shot back where they came from. Of course, it stands to reason that out of three or four thousand, there will be some that never work.

Most Canadians think we are no good, but if they could travel through our agricultural counties they would change their minds.

Let me speak a word to the Scotchman who signs himself, "A 1907 IMMIGRANT." He says that he considers eight cows an hour is good milking. Well,