

oughly mixed with the ingredients of the soil, which must necessarily take place before they can be available plant food.

Stable manure, and all others that are made on the farm from vegetable matter, must decay before they can possibly be assimilated by the crops to which they are applied. If



We are going to the Ontario Provincial Fat Stock, Dairy and Poultry Show.

they are hauled out on the field this fall or winter, and plowed under, they will be worth twice as much to the coming crops than if they are left until next spring. I think of a case of exactly this kind, where one part of a field was manured last fall and the rest the past spring. The cultivation was the same all over the field, but difference in the corn crop is greatly in favor of the part that was manured in the fall. It could be told to the very row, by the color and size of the growing crop, and the yield of grain was materially better.

For many years past it has been my plan to haul the manure from the stable and feed lots direct to the fields while it was as fresh as convenient to handle, no matter at what time of the year it might be. I want no leaching of manure in the lots that can be avoided, but that whatever good there may be in it to go directly into the soil. Piling up manure and allowing it to heat is very wasteful, because much of the nitrogen is made volatile and passes off into the air, where it is lost to the farm. Any handling of coarse manure that can be avoided is a needless expense. It is certainly less work to clean out the stables, directly putting it on a wagon or sled, and taking it to the fields at once, than to re-handle it a time or two, as must be done where it is thrown into a heap and afterwards loaded and hauled away. There might be some old wagon or sled, devoted to this purpose on the farm, leaving it where the manure can be thrown on to it at any time when cleaning out the stables.

Muriate of potash, phosphate rock, and other forms of chemical manures, containing potash and phosphoric acid, are much more efficient, and hence more economically used, if they are applied in the fall. That is just the time to do it to the best advantage possible. The chemicals will become dissolved by the winter rains, and be in a far more acceptable condition to the crops than if in a fresh state.

Sometimes they are a detriment rather than a benefit to the crops, because of their action upon the newly-planted seeds or tender rootlets. Under some conditions they have a caustic effect. I know of my nearest neighbor the past season killing his melon seeds by putting these very materials in the hills abundantly at the time of planting. The second planting in the same hills went likewise. He blamed the seed man, one of the best in the country, with sending him poor seeds. In talking with him about his failures I asked him about the fertilizers applied and at once suggested the remedy, which was to mix in a lot of fresh soil that had not been fertilized. Upon doing this and planting from the same lot of seeds the third time, he had a good stand, but the melons were very late.

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Fall Treatment of Grass Lands to Prevent the Ravages of Wire Worms

The parent of the wire worm is an entirely different insect from that of the white grub. In this case, the fully developed insect being the slender, brownish beetles, known as snapping beetles on account of their habit, when placed upon their backs, of throwing themselves into the air with a slight snap and turning over and alighting upon their feet. Their life history is very much the same as that of the white grub. These are also grass-feeding insects, but while the white grub is more usually found upon higher lands, which the female seems to select for a place to deposit her eggs, the snapping beetles, or skip-jacks, seem to prefer the lower, cooler and damper lands. It is for this reason that the lower lands are more often affected by this pest, and it frequently occurs that the patches of black soil among clay will be more especially subject to infestation. While it would seem that the harder and more compact body of the wire worm would be less susceptible to climatic influences, nevertheless, we find no more practical prevention of the occurrence of this pest than the fall plowing of sod lands, and, as with the white grub, it is quite probable that late fall or winter plowing will be preferable. While this does not, in all cases, insure absolute freedom from the attacks of these insects, there seems a stronger probability of their ravages another year being prevented in this way than by any other known to us.—*Press Bulletin Ohio Experiment Station.*

Winter Eggs

We are often prone to lay to "the perversity of nature" things which are largely our own fault. We often complain of bad luck, or calmly accept it without complaining, feeling that we must take "the inevitable," when the truth is, if we looked about us a little, we might very easily remedy that which troubles us. It often seems to be a hard provision of nature that our hens should lay plentifully in the summer, when eggs bring 10 cents a dozen, and go back on us completely in the winter, when eggs are worth from 23 to 50 cents a dozen. But the truth is that it is the fault of neither nature nor the hens. The whole trouble is that we do not get our hens into the proper condition to lay eggs. We are not fair to the hen.

When we send a man to do a piece of work we are usually careful to select a man who is in a working condition,



We, too, are going to London!

and not a man who ought to be in the hospital. But somehow or other we never seem to think about that with our hens. Anything that wears feathers and goes on two legs seems good enough to us to lay eggs, no matter what its condition. Here is where we make mistake No. 1.