

## Agricultural.

## Weeds and Cultivated Plants.

What are they? Any plant growing where it is not wanted. All plants, then, in certain situations may be weeds? Yes, and all weeds—in their places—are valuable. So, however valuable a plant may be intrinsically, if it grows in a crop of other plants, and where it is not wanted, it is a weed.

Mustard and rape are plants of great economical value, and yet they are among the vilest and most noxious weeds when growing among other crops. We were forcibly reminded of this a short time since, during a trip down the Chicago branch of the Illinois Central railroad. From Kankakee to Mattoon, a stretch of over 100 miles, one-half of the oat fields were yellow with this pest, and in some of the fields there was more mustard than oats.

Every good farmer who sees such unthrift, either from the cars or the public wagon road, carries away—and very justly—with him the impression of bad farming. There is really no need that the farms should be thus overrun with these evidences of slack farming. The ground once made free of weeds, a little care in the cleaning of the seed grain would do the business.

Rye growing in wheat is, then, nothing more or less than a weed, and yet it is not unusual to find rye in the winter wheat crop, and oats in the crop of spring wheat is almost the rule rather than the exception.

Wheat, before it is ground into flour, is not only freed from every other seed, but in the better class of mills it is also rubbed clean from other foreign matter. Indeed, the best mills take from it also a good part of the bran before it is ground. Now, if wheat goes to the buyer foul, he must necessarily deduct not only the discount for the trash so held, but also the cost of cleaning. In doing this, to save himself from loss, he must estimate the trash at fully ten to fifteen per cent. greater than it really is. Few persons have a just appreciation of this loss. It often amounts to ten per cent. of the grain harvested, and sometimes to fifteen per cent.

Who pays for this dirty grain? The buyer? Not by a good deal. He is too good a business man for that. The seller is the man who foots the bill.

The cleaner grain goes from the farmer to the buyer, or miller, the more money it brings per bushel. The seeds that are separated from the grain at the mill is just so much lost to the farmer, for the shrunken grains blown out, and the oats, rye, barley, etc., would be available to the farm as rough feed for stock of many kinds.

We have before spoken of the loss from trash in grain. If proper care were taken, instead of amounting to five, ten or fifteen per cent. of the whole, it would not amount to more than one or two per cent., and this could be easily cleaned out. Of course untoward seasons would give shrunken or light grain, but even this, if perfectly clean, will bring more money in the market than plump grain mixed with dirt and the seeds of weeds.

Another thing that we are all of us apt to be careless about, is in the saving of seed. The practice of Mr. Hallet, of England, is to be commended, who made so marked a difference with his seed wheat in a few years, by careful selection, that his seed acquired the name of pedigree wheat, and sold for excessive prices. Why do we not take more pains in the selection of our seed grains? There is an almost uncultivated field in this direction in the West, and indeed in all parts of the country. If we were as careful in the saving of our seed grain as are the owners of fine stock in breeding, there would be less heard than there is of that myth, "seed running out."

One man by careful cultivation, and perhaps selection, brings a given variety to a high standard of excellence and productiveness, sells it—very properly—at high prices. Being bought by farmers, and—because it has cost so much—carefully cared for, the cultivator is surprised at its productiveness. Soon he acquires a full stock of seed, the care slackens, the product deteriorates, and finally "runs out." No. The owner has run it out by his carelessness and want of care.

If every farmer would be as careful in the saving of seed as he is of his cash, we should get rid of not only the superstition that varieties run out—as baseless a one as "planting in the moon"—

but there would no longer be any place for that class of swindlers who each year have something wonderful in the shape of "branching corn," "wonderful oats," etc., that upon a critical view prove only to be very old varieties rechristened. There would be no longer chance for swindlers to get rich, selling trash under the name of improved seeds.

Let us commence then this year to improve our grains; at the same time let us agree each with the other to do something more than we have heretofore done for the eradication of weeds. Do not let these grow and seed in every fence corner and other uncultivated places. Keep them killed in some way, even if there is no crop on the ground. Plow them under if there is no easier means of destroying them; not that we consider it economical to let land grow up to weeds for the sake of plowing them under. A crop of weeds plowed under does not constitute a fallow by any means, as some persons whom we have met have supposed.

It is true, however, that weeds are a part of the rotation in natural crops. They have their uses in the economy of nature, and there they are not weeds. If they were not valuable they would not have been created. Man has taken for his use such as were best adapted thereto. These values differ in different countries. A plant valuable in our climate, becoming perhaps of no economical value in another, and so should be treated as weeds when found growing among those which are then valuable.

So, if there were no "weeds" there would be no valuable plants, and if nothing grew in the ground but the clean seed sown, there would be no incitement to cultivation, and crops would deteriorate. Therefore weeds have value as an incitement to cultivation. Because nature uses weeds and grass to cover waste places, it is no reason why they should be allowed to grow among cultivated crops. They are incitements to cultivation; they are found in their places; but that place is not among plants cultivated for their money value in the great markets of the country.

## Hungarian Way of Preserving Corn Fodder.

A Hungarian farmer communicates to the *Agriculturist* a way of preserving corn fodder without curing, in a sour, succulent state, for winter use.

The curing of various kinds of green fodder into sour hay, is, perhaps, not commonly practised in this country, especially the souring of green corn, which should be practised with more effect on the farms of the Continent of America. The making of dry hay of green corn is an injurious manner of curing it. Although the writer of this is not acquainted with American farms, except by reading, nevertheless I communicate a method for the preservation of juicy fodder particularly important for corn-producing America.

The corn is sown broadcast or drilled in rows nine to eighteen inches apart, nearly three and one-half bushels to the acre. The field must be kept free from weeds. At blossom time the corn is mown, loaded into wagons and hauled in. The home-brought corn is put in large ditches, ten or twenty rods long, and is here pressed in by a few men walking upon it. The ditch is twelve feet deep, twelve feet wide at the top, and six feet at the bottom. The length will need to be sufficient to contain the fodder to be preserved. The ditch might be dug in dry ground. When the ditch is filled, the green corn is built upwards like a stack about ten feet above the level of the ground. The finished stack is then covered with earth about two feet thick on every side. It is best to cover the top of the stack first, because the weight of the earth presses down the green corn, and as much earth is not needed for covering, as is the case when the sides are covered first.

The sour hay making enables us to store a large quantity of juicy fodder for the winter, and, if well covered with earth, it may be stored for a few years without injury. The most important of all is, the beasts, being once acquainted with this sour hay, like it very much. With us (in Hungary) the sour hay is cut and mixed with corn meal, or some other ground grain, and given to the cattle; but the sour hay may be fed uncut also.

In sections where stones and brick are to be obtained cheaply, the sides of the ditch may be walled, but it is not necessary.

I should be very glad if these lines would encourage the sour hay making of corn by American farmers.

## A Talk About Farming, Including Composts.

By Professor Binklard—At a Meeting of Markham Farmer's Club.

The Markham Farmers' Club met at the Victoria Hall, Unionville—about one hundred members present. H. P. Crosby, Esq., Vice-President, occupying the chair, and introduced Professor Buckland.

The professor stated that he did not intend to give them a regular lecture, but rather a talk about farming, including composts. He claimed that to make farming successful, there must be system, rotation of crops, and thorough cultivation. There was little use to apply manures, unless the soil was thoroughly worked. Manures are of three kinds—animal, mineral and vegetable. A farmer of his acquaintance lost a fine steer, nearly fit for beef, by being choked with a turnip, a few days ago, and dug a hole five or six feet deep to bury it. He would recommend persons losing animals to throw the carcass on the compost heap, which made invaluable manure. To prevent the escape of ammonia apply a coating of plaster—which was also very valuable to the compost heap. Many of the farmers allowed the most valuable portion of their manure to escape by allowing their compost heap to precolate away into streams, thence to rivers and lakes. This should be prevented, as it was more valuable than expensive manures, such as guano, &c. Woolen rags were also valuable as manure. Have them reduced by being cut, and they are excellent for hops and wheat, applied in the fall. It materially improved the first crop, and the second crop still better. The waste of woollen mills was equally valuable. Bone manure was also invaluable. Britain was taxing every country for bone. Should allow no bones to lie in the fence corners. Break them up with a sledge—the finer broken the better—and treat with sulphuric acid. No offal should be allowed to waste, throw all on compost heap, and preserve the liquid. Night soil, with proper management, is one of the most valuable manures. Cover it and mix plaster or dry earth, which was also necessary for sanitary purposes; plaster fixed the ammonia and presented the unhealthy and offensive smell; it was fully as valuable as guano or any foreign manure which English farmers found necessary to have analyzed, it being so much adulterated of late. He again adverted to the wasting of farmyard manure, and claimed that \$100 worth of liquid manure was, on an average, wasted by each farmer, that fully half was allowed to waste for want of husbanding annually. He then took up the mineral manures, which include lime, plaster and salt. Lime, he claimed, was the most essential, no soil was productive unless it contained a proper proportion of lime, and had been used, to, as a fertilizer from time immemorial. It strengthens the stem, destroyed insects, and the grain was not so much in danger of rusting. Use from eighty to one hundred bushels per acre once in five years, too much put on land was only wasted, plants would only take up a certain quantity.

Plaster, under certain conditions, produced marvellous effects on crops, particularly in dry seasons, especially on clover and all broad-leaved plants, as it attracted moisture. Its great mission was in bringing other matter to act upon the plant. It should be applied in the early growth of the plant, so as to attract the moisture from the air, and thus give the growth of the plant such an impetus as to escape the ravages of insects. If the action of plaster was not always satisfactory, it should not be condemned, and one test, if a failure, was no evidence, but that under other conditions and circumstances magical effects would be produced. Salt Parkes, a chemist, created a furure in England by advocating a generous use of salt as a fertilizer. Forty years ago the celebrated chemist, Leibig, had also produced a similar excitement about mineral manure. There was a heavy duty on salt, and the English legislature was compelled to allow farmers to draw back on salt for agricultural purposes. Most plants require the two elements of which salt is composed. Its action upon the plant is varied. It absorbs moisture, most beneficial in dry, warm climates and dry seasons. Some claimed that these stimulants exhausted the soil. This was a fact imperfectly stated, as the old adage ran, "lime without manure made both farmer and land poor." But soil could not be exhausted—it had no nervous system. It might be impoverished, but by rotation of crops and proper manuring can be kept

rich. Save ever apply plaster, lime. He would advise barrels of plaster in water closets estimable in manure present, who had relate the result.

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Mr. James T plaster together, of plaster, and f ham Economist.

## Enem

The present troubles to the people by the Colorado small beetle akin nip, beet and cucumber known by entom or flea-beetle, is *ecucumeris*, from vines; it also infests the potato, eating until they are veins left, in many, destroyed, the plant

For this insect remedies. The against the Colorado for it. This man as for the former green with twen (gypsum), or rye leaves while the or a heaping tab mixed in a paiff and while kept broom-corn whis may be sprinkle watering can.

Any fine grain against these few plants they may coal ashes, dry sprinkled upon that they will water in which dissolved, it will necessary to use need arrives, less destroy the crop upon them, as w breed and inc Times.

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