Agriculture.

Crushed Oats of England.

The crushed oats of England is certainly the most admirable feed for horses that can be. With us this article is practically unknown. They use, in New York and vicinity, what purports to be one-third sound corn and two-thirds sound oats ground together. Were it truely this, it would be excellent feed, but it is notorious that, not only is second quality of corn used, but the siftings of corn-meal, consisting of the bran, and often of bits of cob with some good meal, coarsely ground, are used instead of mixing the grain and grinding it, as should be done. Then, too, the oats are the lightest and poorest that come to market, and often full of dirt and grit from having been lodged while growing, or from lying too long in the swath before binding up. From whatever cause oats become unmarketable, it does not prevent their being used for "ground feed."

In England oats are crushed by hand in machines not larger than a root slicer. One large, smooth-faced wheel, with a face about three inches wide, revolves in close proximity to a smaller one, six inches in diameter, and about the same face as the larger one. A hopper permits the discharge of the oats between these two wheels, which, rolling together, crush each grain as flat as a wafer. As they drop from the crusher, the plump oats are nearly circular; those less plump elliptical, and the few false kernels in the samples I examined were flattened and broken, but showed no white flour, and no definite form. In one ordinary sample, which weighed 44 pounds to the bushel, almost every oat was flattened into a white, floury disk, nearly or quite as large as an old-fashioned silver 3-cent piece. Oats thus crushed may be fed as they are, and not one will pass the digestive organs unacted upon, as so often happens with whole oats; they may be mixed with cut or chaffed hay, wet, or with steamed fodder of any kind. They go decidedly further. Those who figure most closely, are the most positive in their approval of them from motives of economy solely, and uniformly assert their superiority to ground oats, even though they were to grind them themselves.

Oat-crushers will certainly find their way to popularity among us, for with our light weight oats they are more important than where the heavy oats of Europe can be obtained—oats weighing 40 to 47 pounds to the bushel are not uncommon there, while here 32 pounds is a legal bushel by weight, and the measured bushel oftener falls below than it goes above that weight. Many city dealers sell 90 lb. bags for 3 bushels.—*American Agriculturist.*

What to do with Non-Heading Cabbages.

Last autumn I was mourning over an unusual number of half developed cabbages, which were only fit to be fed to the cows, and mentioned the fact to a Duchess Co. farmer, who is in business in New York, and has lately bought a farm near us, asking if his crop had turned out badly. His answer was, that he had no more soft heads than he wanted, or to the effect that he would feel disappointed if he had not a considerable number. Now we, neither of us, raise cabbages for market, but for our own consumption mainly, and I was utterly at a loss to know what he could do with a quarter of his crop that failed to make heads.

He told me that he dug a wide trench, so deep that after some top soil was thrown in he could set the cabbages out in the trench as close as they could stand, and their heads would not come up level with the top of the ground. When planted, he covers the trench with boards and some brush, corn-stalks, salt-hay, and earth on the top, keeping it open at the ends or elsewhere until cold weather, and then covering it in close. He said they would all have firm, solid heads in the spring.

In the spring we enjoyed the best cabbages we ever ate. They are rather small to be marketable, say 4½ to 6 inches in diameter, solid and sound, crisp and tender, as delicate as cauliflowers, and what is more remarkable, I never know whe nthey are going to have cabbage for dinner until I see it upon the table. The great objection I have to this most wholesome and delicious vegetable is, that it usually fills the house with its perfectly detestable odor, so to have cabbage without this drawback is worth all the trouble it costs. If these winter-headed cabbages could once become known in the market, I am confident their merits would command for them a ready sale all through the spring. The cabbages in market at this season are pretty poor. They are very apt to be slightly decayed, will keep but a little while, as they wilt at once, and soon after rot. I wish now that I had enough to test the market with, but I have not, and write this partly in the hope that somebody else will do it next year. While on this subject I would like to mention a delicious kind of cabbage, which I saw for the first time in the Island of Jersey this winter. It is a non-heading variety, growing like a kale, but with perfectly smooth leaves, and is known as Couve Trouchouda, or Portugal Cabbage.

Artifical Manure For the Crop.

One of the most instructive experiments on the artifical fertilizing of corn that has come to our knowledge is one made last season by Professor Cook, of the New Jersey Agricultural College, on the College farm, and related by him at the annual meeting of the New Jersey State Horticultural Society. The New Jersey Agricultural Society is a working institution, and its principal, Professor Cook, a working man; neither the one or the other is frequently heard of by the general public, unless it be through some valuable results of the quiet and unostentatious labors of the College farm, which becames generally known by fortunate accident, as this has been. In a talk upon fertilizers at the above meeting, Professor Cook detailed a series of experiments with the corn crop, which at the present moment are of great and seasonable interest. The experiments were made with the greatest care, and as the Professor is disinterested, having no patent upon the fertilizers or the formulas used, the results may therefore be taken as in every way trustworthy. They are as follows: Upon unfertilized soil the yield was equal to 85 bushels of corn and three-fourth tons of stalks per acre, valued at $97.46.

An application of 100 pounds muriate of potash, costing $2.75 per acre, gave an increased value of $23.55. An additional application of 300 pounds sulphate of ammonia and 300 pounds of superhosphate of lime, costing $16.65 per acre, gave an increased value of $12.08. An application of 400 pounds of sulphate of ammonia and 300 pounds of superphosphate, with the potash, costing $26 65 per acre, gave an increased value of $13.67. An application of 200 pounds sulphate of ammonia and 500 pounds superphosphates, with the potash, costing $19.25 per acre, gave an increase in value of $19.31. An application of sixteen tons of barnyard manure alone, costing $40, gave an increased value of $7.28.

The deductions from these results may be made as follows:

1. The soil originally was in what would be considered an excellent condition.
2. That muriate of potash applied at the rate of 100 pounds per acre upon soil of an excellent character is very effective, and may be profitably used.
3. That any other fertilizer than potash salts can be used only at a loss upon a corn crop grown upon soil in good condition.
4. That even barnyard manure may be used in excess, and therefore unprofitably, when the soil has been brought by previous good culture and fertilizing up to a certain standard of productiveness.
5. That the direct application of barnyard manure to the corn crop is not so effective as previous applications well incorporated with the soil.
6. That a decaying clover sod (as we assume with good reason was used in this case) furnishes abundant ammonia for a full crop of corn.
7. That a previously manured clover sod is the best of all preparations for a corn crop.—*Michigan Farmer.*

Change of Seed.

If there is any one thing that contributes more than another to success or failure in farming, it seems to me it is the changing or not changing of seed. By continued sowing of the same seeds in the same climate and on the same soil, a serious deterioration seems to take place, and the yield becomes less and less, and the quality of the grain poorer and poorer. Then, again, most farmers fail to select the best, even of their own crops, for seed, or to keep their seed grain free from weed seeds and other kinds of grain, so that even to get clean seed it is necessary for them to buy seed grain that has been carefully raised, so as to be free from all foreign admixtures.

It is of great importance that farmers should frequently exchange seeds from one neighborhood to another, and from one section of country to another, and even from one part to another of the same farm. It is well known how much larger the yield and better the quality all grains of northern origin produce in a few years, after being freshly brought from their native region. It is sufficiently so to fully account for the extraordinary productiveness of Norway oats and the many new varieties of potatoes.

To illustrate the point, a few years ago the writer got some seed wheat from far north, and the product the first year was twenty bushels to the acre and the quality excellent. A neighbor, an old Frenchman, also had wheat that year, and while growing and when ready to cut, it looked as well as that from the northern seed; upon threshing, the yield was only seven or eight bushels per acre, and this in a region of country where the average crop is perhaps twelve to fifteen bushels per acre. I said to my neighbor, why don't you change your seed? He replied in his broken English, "Oh, he very good seed. Had him twenty years"—and so he had, and that was what was the matter.

Again, in buying to change seed, one should try to secure improved seed and varieties, and thus accomplish a double object, or "kill two birds with one stone." There is serious loss in raising wheat, oats or barley that will give a small yield of inferior grain when a change of seed will change the yield for the better; or in raising eight, twelve or forteen rowed corn, with shallow grains, when by getting improved varieties one can have twenty to thirty rows of kernels and a depth of fully three-fourths of an inch. Farmers, change and improve your seed.—*N. W. B., in Rural World.*

Selected Seed Wheat.

It has been well understood by farmers and millers generally that to produce a large yield and a good and uniform qualify, seed grains should be frequently changed from one kind of soil to another, just as rotation of crops is found indispensible to preserve the producing qualities of land. Still farmers in this country have been negligent in the matter. When they get a good kind of seed they hang to it, growing it from year to year, never dreaming that every year of use robs it of some of its superior merits, and that it will gradually run out. To remedy this growing evil, the Waterloo District Millers' Association at its meeting in Waterloo on Wednesday, decided to purchase the best lots of seed wheat that could be found and offer it to farmers at as low figures as possible, to induce them to make a change that has long been felt necessary. Accordingly, a committee was appointed, consisting of Mr. William Snider, of Waterloo, President of the Association, and Mr. Goldie, who will go to Rochester next week to see what can be done to test further the wheat-growing interests of this country.

A New Enemy of the Corn Crop.

A new enemy to the growing crop of corn has been discovered this spring, which is committing considerable destruction in some sections of the country. It is a peculiar black worm which can scarcely be crushed on the loose earth, as it is encased in a suit of armor difficult to break. They operate in the corn hills by eating off the young plants. As many as ten or twelve worms are found in one hill. The cut-worm has hitherto been a great annoyance, but this new pest is said to be even more destructive. In some townships farmers are busy replanting cornfields that have been thus devastated. Paris green has been found to be as efficacious in exterminating these worms as it is in destroying the potato bug. Powdered white hellebore is said to be very efficacious.—*Reading (Pa.) Times.*

Draining Pays.

So says a correspondent writing from Springfield, Vt., and who, for several years past, has been engaged in draining a once worthless, but now valuable meadow. The meadow was divided by a crooked stream which rendered it too wet for cultivation, but by digging a straight ditch through it, three feet wide and three feet deep, with permanent walls to support the banks, and running other drains into this, the land has been improved until it now produces immense crops of hay and grain. Seventy-five bushels of corn, and from seventy-five to one hundred bushels of oats to the acre, have been raised on the land since the drains were completed. The expense of draining the land has been paid for several times over already. We wish other farmers owning such waste lands could be made to believe that "draining pays."—