Grasses and Forage Plants.

Curing Corn Fodder.

Many farmers who have no difficulty in drying the common coarse corn stalks, from which ripe ears have been pulled, are disappointed and vexed to find that they do not succeed in curing thickly-sown corn stalks that have been grown for fodder purposes. They wonder why the thin, spindling stalks do not keep at least as well as the thicker ones. There are two reasons for this. One is that the thin stalks lie more compactly together in a stack or mow than the coarse ones do, and are therefore more apt to ferment and get mouldy. The other is that the stalks which have ripened ears are much less surcharged with moisture than those which have retained all the succulent juices within themselves.

Ventilation is the great thing to be secured in the preservation of corn fodder. If placed in stooks, well bound at the top, it may be left in the field until very late in the autumn, so as to give the *searching winds opportunity* to dry it thoroughly. Some leave these stooks of corn in the field, and haul them as they are needed for foddering during the winter. If carted to the barn-yard and stacked, thorough ventilation must be secured by some device or other, else the crop will be a loss. A stack may be built on a platform of poles raised a little from the ground. An easy method of securing ample ventilation is by means of empty barrels, furnished with handles, or a cross rope, and drawn upwards as the stack is built. Other expedients to accomplish the same end may be resorted to, but effectual measures must be adopted to provide circulation of air, or the fodder will spoil. It is easy enough to cure corn stalks in such a way as to have them green, fresh, and toothsome, if the proper means be taken, and there is all the difference in the world between this fodder when well and when ill-cured. In the one case it is a sweet, nutritious feed, while in the other it is mouldy, bad-smelling, repulsive, and worthless.

A Crop of Chess Hay.

Farmers in the United States are very much in the habit of writing the local as well as the agricultural journals, giving details of their farm practice and experience. This is a good thing, and tends to awaken interest and spread information among the tillers of the soil. A farmer in Pike county, Illinois, publishes the following item in the local paper. It is not only interesting as narrating how a crop of weeds was utilized and a crop of clover saved, but in its bearing upon the much vexed subject of the spontaneous growth of chess, it is worth reading and considering:—

"Three years ago I had twenty acres in wheat that I seeded to clover, getting a fair stand for the latter. Last year, and the season previous, I pastured the clover. Unfortunately, last season I was obliged to use my pasture too late, and the consequence was my clover drew out and froze out in the winter, and this spring the crop was entirely gone. I determined, having more ground for ploughing than I could use, to let it lie, grow up to weeds, and whatever clover might come turn it under early and re-seed to wheat and clover, thus losing one year's use of the ground. Instead, however, of growing up to weeds there came up as full a crop of chess as if it had been regularly sown to chess, and I have just finished mowing and stacking, and now have in stack over twenty tons of almost entirely pure chess. I cut it green, and it consequently did not scatter out, and made the heaviest hay I have handled for many a year. There is a small quantity of clover with it, but no weeds, and my ground is as well seeded to clover as I could desire. And now about the chess. I can readily understand how the seed could lie in the ground and germinate under favorable circumstances, but the quantity that thus lay there for three years, and then grew, surprises me. And why it had not germinated, and been eaten off by the cattle during the two years it was in grass also surprises me. Be it as it may, I have got the crop, have not lost the year's use of the ground, and the field is nicely settled to clover—better, in fact, than it was at first."

Experiments with Fertilizers on Grass.

Mr John I Carter, Superintendent of the Eastern Pennsylvania Experimental Farm, sends the *Bucks County Intelligencer* the following report of experiments made with artificial manures:—

Plots containing one-eighth of an acre were laid out on ground in wheat last year, seeded to timothy and clover, and the grass well set, though principally clover. April 10th, 1874, the following fertilizers were sown at the rate of $30 per acre, except the plaster and salt. The grass was cut June 26th, and put up in good condition June 27th, resulting as follows:—

No. of Plots.		lbs of fertilizers.	lbs of hay per ¼ acre.
1.	Nothing		600
2	Plaster	1 peck.	650
3.	I P Thomas Ground Bone	50 lbs.	690
4	Pure Peruvian Guano	45 "	735
5.	S. Carolina Dissolved Rock	75 "	700
6.	Sulphate of Ammonia	17½ "	650
7	Nitrate of Soda	25 "	675
8.	Muriate of Potash	41 "	651
9.	C H North's Animal Dust	45 "	624
10.	Common Salt	1 peck.	
11.	Mix of Sulp Ammonia, 6 lbs, Muriate Soda, 7 lbs, S. Carolina Dissolved Rock, 25 lbs	38 lbs.	691
12	South Carolina Rock, double quantity	150 "	735
13.	Nothing		550
14	Equal values of Soda and Potash		600

Additional experiments were made with plots upon which fertilizers were used when they were in wheat. These plots were retained to test the continued action of the fertilizers. The third column shows the yield of wheat in 1873 on these plots.

No. of Plots.		lbs. of fertilizers.	lbs. of hay per ¼ acre	lbs. of wheat ¼ acre.
1.	Bone and Ash Compost	$30 worth	644	2[illegible]
2.	Dissolved S. Carolina Rock		700	257½
3.	Kainit		500	225
4.	Ville's Wheat Food		620	251
5	Nothing		496	190
6	Ground Bone on surface broadcast		700	2[illegible]2½
7.	Ground Bone, half broadcast, half drilled in with wheat,		716	238
8.	Ground Bone, all drilled in with the wheat		710	252

In another field, on thin ground, where a peach orchard had previously stood, were plots testing manner of ploughing. When ploughed for corn, eight plots were subsoiled sixteen inches deep; a corresponding number ploughed six inches deep. When ploughed for wheat the subsoil plots were ploughed with double Michigan plough, twelve inches deep; the other plots with common plough, six inches deep, other treatment alike in all respects.

	lbs. of hay
Average of subsoil plots per ¼ acre	501
do. common plough per ¼ acre	411

A Few Remarks on Turnip Cultivation.

It has frequently been said, "Oh, there is nothing new under the sun," and I am not so vain as to think that I know more than everybody or anybody; but, as a woldsman of North Lincolnshire who has had twenty years' experience, perhaps I may be able to show something in a new light. Now, it is my opinion, and I hold it as a rule in general, that land only requires twice ploughing for turnips. If there is a little couch-grass (or, as it is generally called in Lincolnshire, "twitch") let it, if possible, be got out in the autumn by digging it out with a manure fork before the land is ploughed at all after the harvest, as the best and also the cheapest way of getting rid of it, and carting it into a heap to rot. The remaining part of cultivating to be done by the Benthall's broadshare, drag harrows, Cambridge roller, &c. With regard to the drilling I may say the drill rows here vary from 18 in. to 21 in. apart—I should say by far the greater part 20 in. from one row to another, and set out and singled with a 9 inch hoe. Now, the principal point I wish to advance is this—that, as the turnip receives its nourishment and support from all round, as likewise the top spreads all round, I think each turnip should be equidistant from its fellow, whatever the distance apart may be, which must be decided by experience and with regard to circumstances, nature of soil, kind of turnip sown, growing more or less top, &c. But the theory I advance is worth considering on the ground of economy in more ways than one, and especially with regard to horse-hoeing; for, being in straight lines each way, as soon as they had been horse-hoed one way over they could at once commence the other way, without having any alterations to make with regard to the arrangements of the horse-hoe. Let us suppose an acre of Swedes so planted, with two turnips to every square yard of land, averaging 7 lbs. each, or a stone per square yard; that would give 30 tons 5 cwt. per acre. But, planted on this principle, how far would they be apart? As it took me some little trouble to calculate this, I think perhaps some of your readers will the better remember it if they calculate the distance for themselves. I shall be glad to hear the opinion of any person at all interested in this matter; and also to answer any question on the point so far as I am able.—*Cor. Field.*

Sorrel.

This plant, *Rumex Acetosella*, is a very great nuisance on some soils, especially light, sandy ones, and is almost as difficult to eradicate as Canada thistles or quack. The best process we ever tried for its extermination is to make the soil as rich as possible, and then seed heavily with grain or clover, and so crowd the sorrel out. The *Prairie Farmer* says:—

Sorrel may be eradicated the same as other weeds, by summer fallowing, or by putting the land into some hoed crop, the production of which will make it necessary to keep the soil clean. If the soil contains many seeds, it may be necessary to follow this course for more than a single year. Another method of subduing sorrel is to put the land into some forage crop and manures that will stimulate its growth. Red or white clover are good crops, and lime and plaster good manures for this purpose. At one time it was believed that an application of lime was sure to kill sorrel, and at the same time was certain to sustain the growth of valuable plants. The fact that sorrel may be found growing in the crevices of ledges of lime rocks will disprove this theory. It is quite certain that the only agency the lime exerts is to sustain the growth of the plants which will overshadow the sorrel, and thus check its growth. It is a popular idea that the application of some substances will act as a poison to certain plants and as food to others, but the notion finds little to support it in science or observation.—*Rural Home.*

Securing the Buckwheat Crop.—Consult any experienced miller, and he will tell you that one great fault with buckwheat is its grit (dust or ground). This it gets by lying on the ground or in swaths, the rains spattering the dust against it when it is moist or mud, and hence adheres the more to it. This should be avoided, as it hurts both buckwheat and the flour. Cut and immediately set up in loose (unbound) sheaves, tied at the top to give it the appearance of a cone, so as to shed the rain. In this way the air will circulate through, prevent mouldings, and yet not dry so fast but the berry will have a chance to mature and ripen, for it is to be cut when part of the crop is yet in the dough—the largest part—and some still less advanced. If left till all is ripe, the crop will be late, and if heavy, will be twisted and lodged, and much of it will "shell" in harvesting. A clear sound crop is what is wanted, and not a dusty, with the late kernels dried, and hence shrunk instead of rounding out and maturing, as they will if put up in sheaves as soon as cut. *Do not* in any case let ve lying on the ground, and cut early, when the greater part of the grains are in the dough.—*Utica Herald.*

Canada Thistles wanted for Manure.—An old man, not afraid of Canada thistles, writes as follows to the *Country Gentleman* of September 17th:—"In your paper of September 3, 1874, page 563 there is a way told us by W. J. F. *now to kill Canada thistles.* I bought part of this farm in 1821, it being nearly all woods. This timber was nearly all cut into cordwood for boiling salt at Salina. Of course the land was cleared slowly, and *thistles got the start of me*, but they are the poor man's clover. I wish I had every thistle in the state on this farm. I have turned under, I presume, five tons of them to the acre when full y in the blow—*summer fallowing and taking off* 1,400 bushels of wheat the next year, from 35 acres, and not one bundle left unbound. This 1,400 bushels was put into shock in five days, with three cradles, and hands to rake and bind. Those who dread thistles do not know how to get good out of evil. I have drawn wheat to Albany from this farm before the Erie Canal was made, this farm joining that ditch for a mile. A poor man must work and step quick to perform what I have done. I have sunk more than 200 stones on this farm, some that would weigh more than twenty tons each, and am quite smart yet, for a man born before the nineteenth century.