

trunk and placed it in a box high out of reach.) "Well, that is very extraordinary—extraordinary, truly," said the green one, opening his eyes. "New, let's see him take it out, and hand it back." "We never learn him that trick," retorted the keeper, with a roguish leer, and turned away to stir up the monkeys.

Agricultural Journal.

From a Treatise on Agriculture, by James Jackson.

CULTURE OF WHEAT.

Wheat is the most important of all the grains, and its varieties are numerous. Among those now in cultivation, the following may be enumerated:—The bearded, the Dunglass, the golden ear, the velvet ear, the egg-shell, hedge-wheat, the Essex dun, the Kentish yellow, the white and red Essex, the Mungoswell's, the Burwell red, the Hunters, and the Georgian. A general division of wheat is made into white and red, with several shades between, and summer and winter. Winter wheat may be brought into the nature of summer, by altering the time of sowing. If winter wheat be sown at the period for putting summer wheat into the ground, in the course of two seasons the winter will become of a similar habit as the summer, and the same process will bring a summer wheat to be a winter one.

In general, the fine wheats are preferred to the brown and red; but the latter is most profitable for wet adhesive soils, and unfavourable climates, on account of its hardness and ripening early. A red wheat, of great productiveness, has been recently introduced into Scotland from Mark-lane.

The variety of wheat most profitable to be produced must depend upon the nature of the soil, as land which has produced an indifferent crop of one may yield an abundant crop of another kind, and land is frequently found to yield better crops if the varieties be alternately changed. It has been observed, that a mixture of grain produces the heaviest crops, and that mixed flour makes the best bread.

The richer description of clays and strong loams are the best adapted for the production of wheat, but if properly cultivated, and well manured, any variety of these two soils will produce excellent crops of this grain. Good wheat land ought always to possess a large quantity of clay and little sand; for although light soils may be made to produce good crops, yet the strong clay lands in general yield the heaviest grain. Sandy soils, being deficient in firmness, do not afford sufficient support to the roots of plants, such as wheat, which do not sink far into the soil. There are light soils, however, made from decomposed granite, felspar, or clay-stone, compounded with vegetable matter, which produce excellent wheat. These soils abound in the neighbourhood of Edinburgh, and in Fifeshire, and the wheat from them is often superior to any in the Edinburgh market. The produce of these soils, however, is much hurt by dry weather.

Colonel le Countur, of Jersey, has made the culture of the best varieties of wheat his particular study for several years, and has arrived at the following conclusion by actual and careful experiment: namely, "that one ear of a superior variety, sown grain by grain, and suffered to attiler apart, produced 4 lb. 4 ounces of wheat, whereas another ear of an inferior sort, treated in the same manner, produced only 1 lb. 10 ounces. This proves that it is of paramount importance to select the most productive and farinaceous sorts for seed; it being obvious, that a farmer who would have sown his whole crop with the last variety, would have probably been ruined; whereas, the superior variety would have enabled him to farm with profit." It is hardly possible to enter a field of wheat nearly ripe, without observing that the ears of some of the plants are much superior to the generality of those growing around. Several new and excellent sorts have been obtained, by intelligent farmers making a selection of these remarkably superior ears; saving and growing them apart until the pure stock was increased to serve themselves; and, in time, there immediate neighbourhood. By such means, the Harcastle, the hedge-wheat, Hunter's, Heckling's, &c., have been originated; and with manifest advantage to the sowers, so long as the sorts were kept pure, and attention being paid to giving the sorts those most suitable soils which experience has pointed out. This mode of obtaining improved varieties of corn, so strenuously advocated by Colonel le Countur, has been practised but by few farmers; a general idea prevailing among them, that it is the richness of the land and judicious culture which gives quali-

ty, and consequently value, to the sample. In this they are partly right; because, though very fine wheat, in a miller's estimation, may be grown on poor land, it is impossible to grow a profitable crop 'a great bulk of both straw and grain answering the farmer's purpose better than the high quality of the latter.—But Colonel le Countur seems fully convinced that both these objects, that is, quantity and quality, may be obtained at the same time, upon ordinary wheat land; and this is a result that should always be kept in view by agriculturists. Adapting the sort to the soils is one means for securing success. The red and yellow wheats answer better on the heaviest clayey loams than the white varieties, which are delicate, and more suitable for lands of a lighter description." Sir George Mackenzie of Coull has found by experiment that the variety of wheat, cultivated so successfully by Colonel le Countur, thrives well in Ross-shire, and in that northern county actually yields a heavier produce than in Jersey. This, however, we must ascribe to Sir G's skillful mode of farming, more than to either soil or climate.

The late Mr. Brown of Markle, an experienced agriculturalist, was of opinion that profitable crops of wheat might be produced every second year on rich clays and loams, if well cultivated and situated in a good climate. Land, however, must be highly manured and judiciously followed, to bear such frequent repetitions of wheat.

"The season for sowing wheat is necessarily regulated by the state of the land, as well as of the season on which account it is not always in the farmer's power to choose the moment he would prefer. After fallow, as the season allows, it may be sown from the end of August to the middle of November. On wet clays, it is proper to sow as early as possible, as such soils, when thoroughly drenched with moisture in autumn, are seldom in a proper state for harrowing till the succeeding spring. In the opinions of many experienced husbandmen, the best season for sowing wheat, whether, on fallow, rag-fallow, or ploughed clover stubble, is from the beginning of September to the 20th of October, but this must depend upon the state of the soil and weather.—In East Lothian, on dry gravelly loams, in good condition, after a clover crop, and well prepared, wheat has been known to succeed best when sown in November. After drilled beans, whenever the season will admit of ploughing and harrowing, wheat may be sown from the middle or end of September to the middle of November; after this season, the sowing of wheat ought not to be hazarded till the spring quarter returns.

After turnips, when the crop is consumed or led off, and the ground can be properly ploughed, wheat may be sown any time between the 1st of February and the middle of March, and it is customary to plough and sow the land in successive portions as fast as the turnips are consumed. It is only on turnip soil of a good quality, verging towards loam, and in high condition, that winter wheat sown in spring, can be cultivated with success. When circumstances are favourable, however, it will severally happen that such lands, when wheat is not too often repeated, will nearly produce as many bushels of wheat as of barley.—The wheat crop, therefore, on an average of seasons, will exceed the value of the barley crop considerably; hence its culture is an object which ought not to be neglected."

Wheat, as will afterwards be more particularly mentioned, is liable to certain diseases, as, for example, smut, mildew or rust, &c. With the view of preserving the grain from these most injurious disorders, it is customary to prepare the seed by steeping or pickling it in a kind of saline brine, or diluted urine. The value of this process may be learned from the following experiments, as stated in various reports before us. Mr. Bailey of Chellingham tried experiments on seed in which were a few balls of smut. One-third of the seed was steeped in urine, and limed; one-third steeped in urine, dried, and not limed; and the other third sown without steeping or liming. The result was, that the seed which had been pickled and limed, and that which was pickled and not limed, was almost free of smut; while that which was sown without undergoing this process, was much diseased. The following experiments were made at Lord Chesterfield's farm of Bradly-Hall, in Derbyshire:—The first was on a peck of very smutty wheat, one-half of which was sown in the state it was bought, and the other washed in three waters, steeped two hours in brine strong enough to float an egg, and then limed. The result was, that two-thirds of the wheat grown from

the unwashed seed was smutty, while that produced by the steeped and limed seed had not a single ear of smut. The second experiment was made upon some very fine wheat, perfectly free from smut. A quart of this was washed in three waters, to make it perfectly clean; it was then put for two days into a bag in which was some black dust of smutty grain, and the result was that a large portion of wheat thus sown was smutty, while out of twenty acres sown with the same grain, not inoculated, not one smutty ear was found. Mr. Taylor, junior, of Ditchingham, near Bungary, rubbed a number of ears of wheat with the powder of smut, having moistened them to make the powder adhere; one-half of these were washed, wetted with chamber lye, and limed. A similar quantity of dry wheat was then procured, the whole being dibbled, each parcel by itself. The produce of the infected wheat was three fourths smut; the same infected wheat, steeped and limed, was perfectly sound. The valuable results arising from steeping wheat seed, need not be further illustrated, and we shall now proceed to describe the process.

Steeping or pickling is performed, as already mentioned, after the seed has been washed, by allowing it to lie for a time amongst stale urine, diluted with water, or salt brine, of sufficient strength to float an egg. This seed is put into tubs, containing as much liquid as will cover the grain a few inches, and allow it to be well stirred, so as to bring all the light grains to the surface, which are skimmed off as long as they continue to rise. Another way, is to put the seed into baskets, which are immersed in the water, are easily taken out, and can be conveniently placed over an empty tub to drain. The seed is left for 3 or 4 hours in the chamber lye, or full six hours in the pickle, after which the liquor is drawn off and the wheat spread thinly on the floor of the granary, where it is well sprinkled over with quick-lime, slacked in the liquid. About half a peck of lime is sufficient for a bushel of wheat, and it should be well stirred, so that every grain may get a portion. If the seed is to be drilled, it should be passed through a coarse sieve after being limed, which will facilitate its progress through the machine. The grain will thus be quickly dried; and it should not lie more than six hours in the heap, then be spread out and used the following day.

Some caution should be used in having the lime properly slaked, for if this is not done, too great a heat may be raised, which will destroy the vegetative principle. Doubts have been expressed of the efficacy of lime, and a solution of copperas is used on the Continent instead. Dry powdered lime would certainly have no effect, but when newly slacked it is very efficacious, as has been proved from experiment. It was found that a steep of lime water alone, in which wheat was immersed for four and twenty hours, proved a powerful preventive of disease, while the good effects of unlimed brine were very inconsiderable.

Of the two kinds of steeps mentioned, urine is thought the most efficient, and it should be used neither too fresh nor too stale, as in the first state it is ineffectual, and in the second injurious.—The seed should be sown as soon as dry; for if allowed to lie in sacks beyond a day or two, the lime may be very hurtful. Another steep, which is recommended by Sir John Sinclair, and is much used in Flanders, France, and Switzerland, is a weak solution of the sulphate of copper, or blue vitrol. The modes of using it are as follows.—

Into eight quarts of boiling water put one pound of blue vitrol, and while quite hot, three bushels of wheat are wetted with five quarts of the liquid; in three hours the remaining three quarts are added, and the wheat is suffered to remain three hours longer in the solution. The whole should be stirred three or four times during the six hours, and the light grains skimmed off. After the wheat is drained, slacked lime is thrown on it to facilitate the drying. Another way of using it is to dissolve five pounds of the sulphate of copper in hot water, and add much cold water to this as will cover three bushels of wheat. The wheat is allowed to remain five or six hours, or even longer, in the liquid. After two or three bags, of three bushels each, have passed through the liquid, one pound more of the sulphate for each bag should be added; and after twelve bags or so have passed through, new liquid will be required.

FATTENING POULTRY.—An experiment has lately been tried of feeding geese with turnips, cut very fine and put into a trough with water. The effect was, that 6 geese, weighing only 9 lbs. each

when shut, actually weighed 20 lbs. each, after about three weeks feeding with this food alone.

Malt is an excellent food for geese and turkeys. Grains are preferred for the sake of economy, but will not fatten so fast.

Oats ground into meal and mixed with a little molasses and water; barley meal mixed with sweet milk; and boiled oats mixed with malt, are all excellent for fattening poultry, reference being had to time, expense and quality of flesh.

Corn, before being fed to fowls, should always be crushed and soaked in water, or boiled. It will thus go much further and digest easier. Hens will often lay in winter when fed in this manner, especially if well sheltered.—*New Genesee Farmer.*

BROWSE FOR SHEEP.—Sheep are not only very fond of hemlock, but it is very healthy for them when properly used. I have fed it to my stock for many years with good effect. The trouble is irregularity in feeding it; in a scarce time for hay they are allowed to eat too much of it. Sheep are supplied too liberally with hemlock, after a long abstinence from green food, it will sometimes produce abortion.

An old gentleman in this town once had a sheep which, for some cause or other, strayed into the woods about the time the first snow fell, late in the fall, and remained there till some time in March, when she came to the barn on the snow crust. They followed her track back to a hemlock swamp, where she had lived all this time on nothing but hemlock, and had kept in good order. She had a lamb the following Spring, and brought it up well.—[Correspondent of the Maine Farmer.]

The Politician.

The Colonial Press.

From the Nova Scotian.
AGRICULTURE.

In the Legislature and elsewhere arguments are occasionally so conducted that persons, not acquainted with the resources of the country and with the elements of our provincial commerce, would be led to suppose that the interest of the farmer and of the fisherman are the very antipodes of each other. Than this there never was a greater mistake. Every firkin of butter that is brought into the market of this City, though it is consumed here, is just as valuable, (provided the current prices of both articles are the same) as a barrel of mackerel shipped to some foreign Port. True it is, the produce of the fisheries gives employment to our shipping, and its sale abroad affords the means of purchasing return cargoes, which are consumed in the Province. Thus the fisheries contribute to the necessities of subsistence, and to many of the comforts that are now considered indispensable in civilized communities. In fact, viewed in any light, the fishing interests of Nova Scotia cannot be too highly valued; and if we were deprived of them altogether, a principal source of our wealth, and commercial prosperity would be lost.

At the same time, it should not be forgotten that the Agriculture of the Country supplies nearly 300,000 human beings with almost all the food which they consume, and without which the Fisheries and Commerce would rest upon a narrow and precarious basis. That the exports of our Agricultural products are trifling, when compared with those derived from the Fisheries, is no proof that the tillers of the soil contribute less to the wealth of the Country than do those

"Who draw their treasures from the deep"

On the first day of last April, there was not a blade of green grass, nor indeed any sign of living vegetation to be seen on the whole surface of Nova Scotia; but the intervening months have rolled away—and as a reward to our farmers, what has our soil produced? Even the vegetables that are daily offered for sale in our green-market, indicate the value of the labours of the husbandman, and make it apparent, that were it not for the hoe and plough in the interior, we should be almost wholly destitute of many of the ingredients that are essential to good living. During the ensuing half-year, the quantities of butter, cheese, beef, poultry &c that will be offered in our market, must greatly exceed any conception which a mere casual observer could form of them; and that only a small part of these articles of consumption will be exported, does not lessen their intrinsic value—they are just as important to the well being of the community as though