Agriculture.

Robbing the Soil.

That the wheat producing soil of the United States is rapidly losing its fertility is no longer a matter of doubt. Such is the testimony of American agriculturists as well as English statesmen. The American Cultivator, Boston, is no mean authority on the subject. We here reproduce the leading article from its last issue :

Only a few years ago the agriculture of the East was self-supporting. We raised enough of corn, wheat, beef, and every commodity, for our own use. Stately and comfortable farm homes were found all over New England, where was present the largest amount of comfort and independence. From the State of Maine cattle and wheat were both sent to Boston market in large quantities. What is now seen in many places in Eastern and Northern New England, where once were these large farms, but weed-overgrown fields and dilapidated farm houses and barns. Young men, comparatively, of the present day, can remember when flour began to be purchased from Genesee and corn from Virginia. Then Ohio was in the Far West. To-day, one of the leading questions among Ohio farmers is how they shall restore the exhausted fertility of her soil. Farms in the State, which twenty years ago would carry twenty-five cows, are now hardly able to support half of that number. What has caused the impoverishment of this once rich soil ? Why is not the valley of the Genesee to-day, as it was for years regarded, the granary of the East ? A depleting and thoughtless system of land-skinning answers. The crops of corn, wheat and tobacco, and the cattle and horses grown in such abundance upon the productive virgin soil, have robbed it of its ability to longer yield remunerative crops.

The farms have been sold by the bagful and baleful ; they have been transported by rail and ship and team, to near or distant cities, leaving a barren soil that can only recuperate itself by a long period of rest, or be accomplished by the farmer at an expense almost too great to be undertaken. And westward the system of eastern spoilation has been transferred. The grand prairies are now contributing of their life-blood the food needed by a hungry world, yet men think their fertility inexhaustible, and forgetting the lessons of old-time farming in the East, say the land of the West is never to need artificial plant food, it will always produce. It will not always produce the crops and the stock it is producing to-day. Let us be philosophers. Is it not reasonable to expect, to believe, that the same course which has brought agricultural dependence to the East, will also bring it to the West, however fertile the West may be ? There is a limit to all natural fertility—that limit is only measured by time. In improvident farming, especially, the future is sure to reproduce the past ; for the same conditions and agencies that have brought it about in the one case, are at work to bring it about in the other case. Nature self-executes her own laws.

It would seem that we of this generation ought to have gathered wisdom from the experiences of the past. But we have not. Had we done so there would have been manifest a more positive principle of economy in using the fertility of nature and a desire to restore wasted resources, and to leave to future occupiers an unimpaired soil. But there are few evidences at the West of providence in agricultural operations. The soil is being sent across the ocean in wheat and beef. The experiences of the Genesee, the Ohio, the Wisconsin farmers are being repeated, and in less than a hundred years the story of devastation will have a sad meaning to all prairie farmers of America. Why not stop ? Why not be philosophers ? Why not save manure ! Why not husband nature's resources ? Why not adopt now that well-balanced system of cattle feeding, sheep husbandry and cropping which shall maintain our land in good condition, at the same time it gives a fair return for the demands made upon it ?

Now is a favorable season for working in the swamps. The ground is dryer than at other times, other work is not pressing, and the interval between the present time and the winter is sufficient to drain the muck and free it from the greater part of its water.

Agriculture in England and America—A Contrast.

For many years I have argued that the whole of the United States would be more prosperous, and the farmers be able to take life easier and make more money, if they would not cultivate so much land. I have continually written about the permanent grass lands in England, which pay a great deal better for lying perpetually in sod composed of all the best native varieties, and never plowed. This is no new thing, or any experiment on a small scale, but a glorious fact on such a magnificent scale as to astonish every American who goes to England. He finds that more than half the kingdom is religiously set apart and held sacred from the plow, and hay is made of such fine quality as to surprise men who have been accustomed to think that old grass in England was all pastured. When it is considered that in addition to half the country being in permanent grass, there are clover and other grass crops which come in rotation on the arable land, and also that one-sixth to one-fourth of all the plowed land is in roots every year, all which are eaten by cattle and sheep, it is not wonderful there is so much wheat and barley grown.

The best land in England is in grass, such as farmers here could not resist the temptation to take wheat from. If such land could be kept from being polluted by cultivation here, sheep could be kept as they are in England. The less money obtained for hay and grain the better it would pay the stock-raiser to graze and grow meat, wool and milk. When a farmer has a fine tract of land, chiefly pasture and meadow, his expenditure in labour is comparatively a mere trifle, and in England this is so well understood that any farm with the greater portion in old grass is sought after and is rented readily. Let every farm with soil suitable for pernament first-class grass be treated as English land is in the best districts, and I would wager that more than double the grain, corn and clover could be grown on the half of the farm. The other half (in grass) could be the best and cheapest soil. The grass land in the Eastern States is that which will not pay to cultivate for corn and grain.

Let any farmer who reads the papers and has common sense views of agriculture consider that although Mr. Mechi, who has a wonderfully good arable farm, has been telling the landlords and the tenants that they ought to agree to plow it all up and bring it into rotation with grain &c., and consider also that the greater part of the Scotch farmers are averse to permanent grass and know little about it, yet under all trying circumstances it is still held inviolable, and instead of plowing it up when hard times come, more is sowed down in properly mixed seeds, to be kept always in grass. When grass is low in price it is folly to talk of plowing up grass which is paying by supporting live stock ; and if half of the land, and the best half, is put into grass and never plowed again, the other half would grow more grain that the whole did before, thus saving the labor of attending to the whole. Of course this would not occur all at once ; it would gradually happen, because all the best land being in grass, the other would be attended to and improved.—[Country Gentleman.

Cultivation of Oats.

A Wentworth county farmer speaks as follows respecting the cultivation of oats :—" When the duty was put on that grain by the recent tariff the farmers of this county sowed large quantities of it. The returns from the threshing machine show a most encouraging result, fifty bushels to the acre being the average ; seventy-five being frequently obtained, and in one instance ninety bushels per acre was realized. The highest average of wheat in this county this season was twenty-five bushels per acre, and when the cost of growing a bushel of wheat is compared with that of the same quantity of oats, it will be found that the oat crop will pay the farmer nearly double. There is another great argument in favor of the growing of oats. Its straw when properly saved is equal to ordinary hay, and some of the farmers have gone so largely into stock raising that it will be found an important article of food. The oat crop is a pleasant one to handle. It is easy to bind and store, and is threshed for two cents a bushel, while wheat costs one cent more.

The Geological Survey has made important discoveries of coal and other minerals in the North-West Territories.

Draining Low Land.

A convenient method is to dig out a broad drain 3 or 4 feet deep from the highest to the lowest part of the swamp. The muck may be thrown out upon the bank upon one side only either in a continuous row or in heaps ; the latter is a better way, as it offers no obstruction to the escape of surface water into the ditch. After this ditch is finished others may be dug from it to intersect any low places that are softer or wetter than others, or to cut springs, or in case there is no especial need for any particular direction for the drains, they may be laid out at right angles with the main drain, and at distances of from 60 to 100 feet apart. A drain three feet deep and six feet wide will yield more than a ton to the running yard, and 100 loads can be procured from 100 yards of ditch. The muck can be dug by contract at 15 to 20 cents a yard, or less if it is free from water and not filled with roots. A cubic yard of fresh muck free from sand weighs about 1,600 pounds, and two yards will weigh a ton after having been dried for two months, but two yards will have shrunk to two-thirds or one-half that bulk during the drying.

Muck may be used for bedding, for which purpose it is cool and very absorbent. The manure thus made is fine, and may be spread with the harrow. During the fermentation with the droppings of the cattle it is decomposed, and adds an equal value, at least, to the manure. It may be used very liberally, so as to absorb perfectly all the liquids from the animals, and in doing this it will effect a most valuable service. After one year's constant use of it we are enabled to speak positively as to the convenience of this substance and its great economy as a means of saving liquid manure.

It may be thrown into the yards to form a substratum for the accumulation of manure during the winter, and into manure-cellars as a disinfectant and absorbent of disagreeable odors. As the manure accumulates, it may be drawn out and spread upon the fields during the winter with advantage. In addition, it may be composed with refuse lime or wood-ashes with great advantage, in which condition it will be of great service as a top-dressing for meadows and pastures. The coarse fibrous portions and the sods and tussocks from the surface may be thus disposed of. Fortunately, there are many farms which have more or less muck upon them, or are so situated that the owner could procure a supply for the digging of it, or making the drains for his less enterprising neighbour.—[N. Y. Times.

Farmers' Clubs.

The Massachusetts Ploughman is a strong advocate of the formation of Farmers' Clubs, and states some of their advantages as follows :

The benefits of such a club may be summarily told as follows : It makes common property of the wisdom and experience of all the members. The isolated farmer draws his conclusions from his own limited reading and observation. Hence the varied opinions and practices of an agricultural community. One tops his corn, another cuts it up by the roots ; one does his haying in June, another never cuts a spear of grass till the seeds are pretty well developed ; one sets his milk in shallow, and another in deep pans ; one digs his potatoes as soon as the tops die, another defers the potato harvest till cool weather ; one ploughs under all his manure and another places it near the surface ; one keeps his meadows perpetually in grass, and another ploughs and re-stocks every few years, and so on indefinitely.

Seldom can two farmers be found whose opinions will agree even on the most common topics of their calling. Each is apt to follow the practice of his father, and from his own limited experience thinks he is right. Now let them come together, and with candor state facts and compare views and practices, and their knowledge will be increased, and their practice modified accordingly. Two heads are wiser than one, always provided that one head is willing to learn from the other.

A correspondent of the Country Gentleman says: "Good manure requires that the animals be fed with food rich in the elements which we wish to predominate in the manure, to feed the plants which we wish to cultivate ; and when we have obtained such manure, care must be taken to make the most of it. The fertilizing quality of manure is not improved by exposing it to rains, sunshine and winds, allowing the salts to be dissolved and washed away. All manure preserves its enriching qualities best by being sheltered until applied to the soil, or mixed therewith.