

AGRICULTURAL.



Make Manure and Save it.

We do not know which is most generally neglected, the making or the saving of manures.

The farmers never seriously sit down to think how they can make manure. They feed their horses, cattle, sheep, and hogs, a certain quantity of hay, straw, stalks and grain. A portion of this they know is retained in the animal, or is dissipated into the air with the breath, and the remainder is ejected from the body, mixed with more or less water. This we call manure. Put on the land, it increases the crops. So much is known. But what more is generally known? What is manure? What is its value? Ask the first farmer you meet, and see if he has ever given the subject any serious consideration. Ask him if he plows under a ton of straw, if that is good manure, and he will tell you that it is not worth much. Ask him if he feeds that one ton of straw to cattle, if it is good manure then, and he will probably answer yes. But it is not. It is as much straw in the one case as in the other. If the original straw was worth very little as manure, it is certainly worth no more after it has been passed through the body of an animal. The animal adds nothing to it. It may be in a better condition to apply to the land, but it contains no more plant-food; in fact, it does not contain quite as much, for the animal has abstracted some portion of the food, although it is true that the greater portion of that which is removed has not much manurial value.

The vender of a patent apparatus for steaming food recently told us that the increased value of the manure would of itself pay all the expenses of steaming hay, straw, corn-stalk, etc. The poor man was evidently in earnest, but we could not help laughing at him. We tried to explain that if the food did not contain the requisite elements to make good manure, all the cooking in the world would not develop them. If a ton of straw or corn-stalks contain only 5 lbs. of nitrogen, the manure made from it can contain no more. We told him that he might rot it, cook it, digest it, or do what he pleased with it, and he would have only the 5 lbs. of nitrogen. He could not make rich manure by steaming food that does not contain the requisite elements. "You cannot make a whistle out of a pig's tail." "Yes I can," he replied, "for a woman in our town has done it!" and he left, thinking that he had decidedly the best of the argument.

What we wish to urge upon the consideration of the readers of the *Genesee Farmer* is this: to make rich manure, you must feed rich food. The manure made from 3 bushels of peas is worth more than that made from a ton of straw. One ton of clover hay will make manure worth as much as that made from four tons of straw or stalks.

We must not be understood as underrating the importance of straw on the farm. It is a valuable article, indispensable to the successful and economical management of cattle or sheep. But do not suppose that straw or stalks alone will make good manure. John Johnston, whose successful practice we have so often referred to, is careful to preserve his straw, and have his yards well littered with it. But he feeds out large quantities of grain, oil-cake, clover hay, etc., and in this way makes rich manure. "What had you for dinner to-day?" asked Pat. "Beef and potatoes," replied his friend. "Faith," said he, "an' that was just what I had, barring the beef." Many farmers are just as careful to preserve their straw as John Johnston, and their manure heap is just as good as his, barring the nitrogen or ammonia of the oil-cake, corn and clover hay.

"What grains make the richest manure?" Beans and peas make richer manure than any other plants we grow. Corn, barley, oats and wheat, about half as good. Clover hay next, but not far behind. Then ordinary hay, which is quite inferior to clover hay, and then straw, stalks, etc. Pea and bean straw make rich manure—one ton is worth three or four tons of ordinary straw for this purpose.

Having got the manure, save it. How is this best done? Some say, draw it out and spread it on the grass land as fast as it is made. Some are careful to preserve it in cellars; and others erect sheds. The great majority of farmers, however, keep it in open yards. This is the least trouble, and if the yards are properly constructed—the buildings all spouted, so that the manure in the yard gets no more water than the rain which falls on its surface—it can be preserved in this way without loss. Let the droppings of the different animals be mixed together. Some farmers throw the horse dung into a heap by itself, and in this case great loss is sustained by excessive heating. Were it mixed with the cold, sluggish hog manure, this would be avoided, and both would be improved.—[*Genesee Farmer*.]

Hog Cholera.—The ravages of hog cholera in portions of Illinois have recently been enormous. It is estimated that this plague has taken off fifteen thousand hogs in one county alone within the past six or eight months. Sprits of camphor, one ounce to the dose, is said to be an effectual remedy, even in advanced stages of the disease.

How to Make Pork.

During the late State Fair at Watertown two well known agricultural gentlemen were examining the pigs, when one asked the other which was the cheapest way to make pork.

They walked on, and a man who had charge of one of the pens, and had heard the question, turned to an acquaintance and remarked: "That's easy enough. Get a good pig and feed him well."

This is a complete treatise on the art of pork making, condensed into a single sentence. It should be painted on every pig-pen.

"What is a good pig?" Glenny, in his "Farming for the million," says: "In selecting a pig look for a good square body and short legs and head." This is brief and to the point. "But which is the best breed?" The old question again. "Yorkshire," says our friend from West Riding. "Nothing better than the Berkshire," says another. "Essex," "Suffolk," says two gentlemen at once; while another claims the honor for the "Chester Whites;" and again you shall be told that these last named are mongrel, flopped-eared fellows—not at all equal to the Leicestershires, Camberlands or Cheshires. Hear what an English writer says: "Of the various breeds and cross-breeds of pigs, it would be useless to say much; they have been crossed in every direction, till every feeder calls his pigs a breed of his own." You must judge for yourself. We believe in breeds; but it is nevertheless true, as a general rule, that "a well formed pig can not be a bad sort."

Having got a good pig "feed him well." What shall we feed him? First, everything that you cannot use for any other purpose. Pigs and chickens are the scavengers of the farm. As far as possible they should eat only that which would otherwise be wasted. Small and partially diseased potatoes, pumpkins—if not needed for the cows—soft corn, the waste of the dairy and the house, all find their way to the pig pens, and are converted into hams and hitches. If you can cook them, so much the better. When fuel is not too high or food very cheap, it will pay. On this point there can be no little doubt. Whether it will pay to cook food for cattle is another question. They have more capacious stomachs than swine, and can digest a less concentrated food.

In fattening hogs keep them clean, warm, dry and quiet. Give them regularly three times a day all the food they will eat up clean. Nothing more fattening than Indian meal, from dry, sound corn. We do not say it is always the most economical. Feed all the nubbins and soft corn first. Pigs, like other animals, crave variety. Barley or rye meal, mashed up with steamed potatoes, is very relishing. "Top off with peas, to harden the pork," is an old English rule. Here, where the bug would leave us few peas to top off with, it is well to feed the peas early in the season. This year, in this section, it is thought that the peas are not much affected with the bug. But our advice is to examine them carefully. The bug is very deceptive. He lies concealed in the pea, and a careless observer may not discover him till he has eaten away half the pea. We believe good, sound, dry corn is as nutritious as peas. There is not much difference. Some say that peas will fatten a hog quicker. This, however, has not been proved, so far as we know. One thing, however, is certain: the peas make the richest manure. There can be no doubt on that point. This is a material consideration—one that we are sorry to say is too often overlooked.

"Get a good pig and feed him well." So shall you have good pork.—[*Genesee Farmer*.]

Lime and Salt Compost.

The mixing of lime and salt is a simple process—the principal conditions to observe are, not to use salt in such a quantity as to render the manure injurious to the crop to which it is to be applied. Having determined on the quantity of lime to be applied per acre, calculate the quantity of salt necessary to add to the lime, which should not exceed four hundred weight to the acre. The salt may be dissolved in water before being mixed with the lime—the compost turned over once or twice, and, if convenient, earth or peat added. The action of the lime and salt is to bring the salt to a caustic state, and the lime is converted into the chloride of calcium.

The compost is a valuable dressing for wheat, oats, clover, &c., and when intended for these crops, the compost should be formed two or three months before the period of application. The action of the compost is not understood to be powerful in destroying insect life. When applied for this purpose, it should be spread on the soil by the use of the grubber, &c. We may mention that any kind of inferior salt, which can be obtained cheap, may be used for forming the compost. A better substance for destroying insects is gas lime. The quantity of gas lime to apply varies with the texture of the soil; but four tons an acre is generally sufficient. This should be applied hot from the gas works and spread evenly over the surface. If applied during the winter to grass lands, the improved verdure of the field will generally show within a few weeks the effects of the top-dressing. If you apply it to land intended for turnips, it should be applied immediately upon the removal of the cereal crop, and grubbers and harrows used to incorporate it with the soil.—[*North British Agriculturist*.]

Benefits of Autumn Plowing.

The tillage and drainage of the soil are very closely related to each other. So indeed, as we said last week, are the tillage and manuring the soil. And these, not merely as cause and effect are related—through drainage does enable tillage, and tillage does alter composition—but as being operations of the same class and kind. And thus Mr. Bailey Denton, though engaged in a lecture upon land drainage last Monday, could not help referring to the steam plow—as the great tillage implement of the future. And we had from him too the striking fact bearing on the composition of a fertile soil, that in a state of perfect tilth one-quarter of its bulk is air.

Mr. Smith, of Lois Weedon, says that in all clay soils containing the mineral elements of grain, perfect tilth dispenses with the need of manuring; and there cannot be a doubt that a deep and thorough tillage enables soil to draw immensely on the stores of vegetable food contained in air and rain.

Messrs. Hardy again says that perfect tilth dispenses with the need of drainage, and there can be but little doubt that deep and thorough tillage facilities the operation of whatever drainage may exist, whether it be natural or artificial.

In both these cases the useful lesson is well taught, that it is true economy rather to put the cheap and copious storehouse of Nature's agencies to its fullest use, than by laborious and costly artificial means to imitate expensively their operation. Such a lesson applies, indeed, beyond the advantages of tillage to the methods by which tillage is to be obtained. Among the earliest suggestions of cultivation by steam power was that of reducing by its means the soil to tilth at once. The land was to be torn down as the deal is torn down at the saw-mill; though before the machine it may have been as hard and firm as wood, behind the tool as it advanced at work it was to lie as light and fine as sawdust. But it has at length been found that it is better because cheaper, and more perfect, too, to leave this last refinement of the tillage process to the weather, which does it without cost. The land is now torn—smashed up—or moved and thrown about by plow or grabber in great clods and lumps. This is best done in dry autumn weather, and thus it lies till spring. Certainly no climate is better adapted for cheap tillage than the English—the rains and frosts of winter following a dry September and October must penetrate and thrust asunder the clung and hardened masses of the soil. No two particles shall remain adhering to each other, if you only give room and opportunity to the cheapest and most perfect natural disintegrator in the world. No rasp, or saw, or mill will reduce the indurated land to soft and wholesome tilth so perfectly as a winter's frost. And all that you need to attain its perfect operation is, first to provide an outlet for the water when it comes—by an efficient drainage of the subsoil, and then to move the land while dry and break it up into clods and fragments no matter how large they be, and leave them for alternate rain and drouth and frost and thaw to do their utmost.—[*London Agricultural Gazette*.]

Making Brine for Beef.—Seeing an inquiry in the *Rural* for a recipe for making a brine for beef, to keep it through summer, I send you mine, which I have found to answer. Pack your beef close into the barrel, then take three ounces of saltpetre, ten pounds of salt, and twelve quarts of water, for every one hundred pounds of beef. Put these into your kettle and boil until well dissolved. Then pour on boiling hot upon the beef, cover the barrel close to keep in the steam. If you want to dry any portion you can take it out of the brine in forty-eight hours and hang up. In the spring take out the beef and cleanse the brine, adding one-half the original quantity of salt and saltpetre, and as much water as will cover the beef when repacked, letting the brine stand until cold before pouring it on the beef.—[Robert Douglas, Tulley, Onon county, N. Y. 1861.]

Water as Fuel.

The use of water as a fuel is now attracting a good deal of attention. We read in the *Revue Universelle*: "The vapor of water has already been utilised in metallurgy as an agent of oxidation in the roasting of certain minerals, particularly to facilitate the separation of the compounds of antimony and arsenic in metallic sulphurets. For several years attempts have been made to employ the calorific power of the hydrogen contained in water; and it is the same line of invention that Messrs. Maire and Valler have sought to utilise as a combustible in industrial furnaces, and particularly in metallurgical operations. Water, fed in a regular and intermittent manner into a hot fire, is decomposed into oxygen and hydrogen. The combustion of the latter, in presence of the atmospheric air (the oxygen of the water being employed in burning the carbon), produces a considerable heat in addition to that of the principal combustible. There results, then, a considerable augmentation of heat, without any addition of solid fuel, and, consequently, a more rapid fusion of metals and materials, and an economy of fuel which the authors of the process state varies from forty to fifty per cent."

It is supposed that the number of German speaking people in the Northern States is 5,000,000.

A Mannerly Youth.

Last week the 'Crabtown Dorcas Sewing Society held their annual meeting, and on motion it was voted "That our Parson wait on Tony Jones, and see if nothing can be done to improve the manners of young Tony."

The next day the Parson called upon Tony, sen., and informed him respecting the object of his visit, to which he replied—

"Parson, I'd let Tony go to meetin' every Sunday, if I only know'd you's goin' to preach. But, Parson, there aint a boy in the village of Crabtown what's got more manners than my Tony, and I can convince you of that in just a minit. You see Tony out there skinnin' them niffers?"

The Parson nodded assent.

"Now, see, I'll call him." And raising his voice to the highest pitch, he shouted—

"To-o-o-n-y!"

The response was quick and equally loud.

"Sir?"

"Do you hear that, Parson?" said the man.

"Don't ye call that manners?"

"That is all very well," replied the Parson,

"so far as it goes—"

"What do you mean by 'far as it goes'?"

That boy, sir, always speaks respectfully to me, when I call him." Then raising his voice he again called—

"To-o-o-n-y!"

The boy dropped a half-dressed fish, and

shaking his fist at his sire, yelled out—

(The Parson shook his head)

"Ye miserable, black, old, drunken snob,

I'll come in there in just two minits, an' maul ye like blazes.

The Parson was astounded. The old man

was disconcerted for a moment, but instantly

recovering himself, he tapped the Parson on

the shoulder, saying—

"You see, Parson, my boy has got grit as

well as manners. This chap will make an

ornament to your society some of 'em days."

The Parson shook his head and mizzled.

Swearing for a Family.

Rev. R. S. Maclay, for thirteen years a missionary in China, has written a book, in which he relates the following anecdote:

During one of our examinations of candidates for baptism at Ngukang, I observed that one woman and some three or four young people had the same surname. This circumstance led to the following conversation between myself and one of the young men:

"I observe you all have the same surname. Are you members of the same family?" I inquired.

"Yes," one replied: "this is mother and these are my brothers."

"Where is your father?" I continued.

"He is at home attending to business."

"Does he approve of your embracing Christianity?"

"Yes, he is entirely willing."

"Why does not your father himself become a Christian?"

"He says it would not answer for all the

family to embrace Christianity."

"And why?" I asked with some curiosity,

"does he think so?"

"He says that if we all become Christians

our heathen neighbors will take advantage of

that circumstance to impose upon us."

"How will they do that?" I inquired.

"Christians are not allowed to swear or

fight, and father says that when our wicked

neighbors ascertain we have embraced Chris-

tianity, they will proceed at once to curse

and maltreat us. Hence father says to us,

'You may all become Christians, but I must

remain a heathen, so as to retaliate on our

bad neighbors. You can go to meeting and

worship, but I must stay at home to do the

cursing and fighting for the family.'"

WARFARE AMONG BEES.—The house of Ezra Dipple, of Conneaut, Ohio, was invaded on the afternoon of Dec. 1st, by seventy swarms of bees, which compelled the occupants to flee to the neighbors. After protecting himself from the attack of the bees, Mr. Dipple returned, and in the air outside the house saw them engaged in a strange conflict, that lasted over three hours until the approach of night, when those who remained alive returned to their hives. The ground was covered with dead bees, and two whole hives were destroyed. This strange warfare cannot be accounted for by persons most conversant with the habits of bees. A flock of Shanghai chickens, located near the place, was stung to death.

THE BUNG HOLE SHARP SHOOTERS.—They have, it is said, a rifle company in Vermont, whose captain takes them out once a week, to practice; he draws them up in single file, and sets a cider barrel rolling down the hill; the men commence shooting from right to left at the bung hole as it comes up. After the shooting is over, the captain examines the barrel, and if he finds a shot that did not enter the bung hole, the member who missed it is expelled. None have been expelled for the last eight years.

TWO SUNDAYS IN A WEEK.—A schoolmaster in Ohio advertises that he will keep a Sunday school twice a week—Tuesdays and Saturdays.

—Since the erection of the first Methodist church in America, 1760, 14,000 have been erected—an average of three a week.