

in the pods, of which they are very fond, preferring them to hay. For feeding in this way, I should recommend planting later, and pulling greener, as the leaves would remain on. I have never fed any but damaged beans to sheep, which I bought cheap, not certainly so nutritious as good sound beans, yet my sheep have done well on them, and have not dropped their wool as they are apt to do when fed on grain. I find half a pound each daily quite sufficient to fatten sheep. But will it pay? is a question that naturally arises, and a very proper question it is, for no farming is good that is not within a reasonable time remunerative. The answer is—It will pay to raise beans directly if the price is good and the market of easy access; or fed to sheep, should the market be distant or the price low. Indirectly, in the crop which follows; this, I think, the most important feature of the crop, viz., the improvement of the soil, for I have, for ten years, proved it the very best preparation for wheat. There is no other crop as well suited for a green fallow as beans because, drawing their nutriment from the air, they do not exhaust the soil, while with their numerous and spreading leaves they shade it, thereby keeping down the growth of weeds. And, finally, their last act is one of beneficence, for by enriching the soil with their leaves, they do what very few of us do—they leave the world better than they find it.

Wolfe Island, March, 1873.

S. GOING.

DEAR SIR:—Your valued and welcome paper to hand. In the essay on the culture or cultivation of turnips, I held myself to the subject—"Culture, to Till, Improvement." I don't think this had anything to do with the quantity of seed, storing, &c., and your judges

with turnips in the whole, for a turnip should never be cut. Never cut the skin of a turnip or a potato when you cook them; nature put that jacket round them to preserve their nutriment. Fill in your steam box some cut hay or straw first on the bottom, then turnips, man-gold, bran, chaff, chopstuf, flaxseed bow's on top—then you have feed for everything.

B—Root trap. A—Boiler and steam pipe into feed box.

My plan is, have a good grainery over your root, feed, pig and fat cattle establishment. Roots received at trap B. Steam house F.—Chaff, bowls, bran, &c., can be received from above. Roots, &c., can be flung in from the root house. Start your little fire at A, well secured. Shut up your steam house, go and attend to your business. Return in proper time, and find a box of the fine-t feed for all your stock. You can have your pigs, &c., as warm as you please. Doors at C, C, C. You can pass through into cattle shed in under barn, &c. I would like to have a place like this.

Yours truly,

ED. McCOLLUM.

MR. EDITOR—I am sadly behind in my correspondence to the ADVOCATE. As for the North Norwich Farmers' Club, I may say that it is an established institution. With a membership of about fifty we do not think of breaking down. I think the plan of electing a president for each meeting is far superior to that of an annual election. Since Christmas we have held meetings semi-monthly, but intend going back to the monthly rule in the summer. Our last meeting in February was an interesting one. Mr. Jno. Ray was president, and his subject was "The Breeding and Feeding of Neat

will produce a fattening tendency. H. T. Losee would force calves and have heifer cows in at two years old. This he said would check the fattening tendency and turn it into a milking property. H. Vanvalkenburg would force calves for beef, but would not feed calves intended for the dairy extra. Would have heifers come in at two, then let them go farrow one year and bring them in again at four years old. Would not buy pampered stock for breeding. Thought stalks and corn fodder the best kinds of feed. J. Ghent would, by crossing with the short-horn, get a larger breed. Thought too many calves were raised by half. Gilbert Moore advised gentle treatment of all animals. Thought that where two teams were required on the farm one of them should be an ox team. They were less expensive, and when worn out could be fattened, and the money received for the beef could be used to replace them by a young yoke. If more oxen were used we would, to a certain extent, evade the most selfish and despicable Harness Makers' Association.

At our meeting on March 8, Elias Mott was president, and the subject was "Draining." The meeting was lively and interesting, but so much has been written and said on draining that I forbear giving an account of the discussion.

It almost seems to me that the most ignorant could see where it is necessary, but for going into the details of under-draining, I consider myself incompetent. It seems to be a trade, and you may read and read till you are blind, but you will never understand draining until you go at it and perform some of the labor.

For our next meeting H. T. Losee was elected president. Subject, "Management and Feeding of Dairy Cows." B. J. P.

#### Table of Vegetable Seeds

THAT MAY BE SOWN IN EACH MONTH, FROM APRIL TO SEPTEMBER.

APRIL.—Sow in hot bed: Sweet Corn, Cucumber, Egg Plant, Melon, Pepper, Tomato, Mustard and Cress. Sow in open ground: Asparagus, English Beans, Beet, Brocoli, Brussel Sprouts, Early Cabbage, Carrot, Cauliflower, Celery, Cress, Kohl Rabi, Leek, Lettuce, Onion, Parsley, Parsnips, Peas, Potatoes, Radish, Spinach, Early Turnips, Sage and Lawn Grass.

MAY.—Sow in open ground: Artichoke, Asparagus, Beet, English Beans, Dwarf Beans, Pole Beans, Brussels Sprouts, Late Cabbage, Carrot, Cauliflower, Celery, Sweet Corn, Cress, Cucumber, White Endive, Kale, Lettuce, Melon, Onion, Parsley, Parsnip, Peas, Potatoes, Radish, Rhubarb, Salsify, Spinach, Tomato, Early Turnip, all Herbs and Lawn Grass.

JUNE.—Sow in open ground: Bush Beans, Lima Beans, Pole Beans, Beet, Brocoli, Brussels Sprouts, Early Cabbage, Carrot, Cauliflower, Sweet Corn, Cress, Cucumber, Endive, Kohl Rabi, Lettuce, Melon, Nasturtium, Okra, Early Peas, Potatoes, Pumpkins, Radish, Spinach, Squash and Swede Turnip.

JULY.—Sow in open ground: Bush Beans, Beet, Carrot, Sweet Corn, Corn Salad, Cress, Cucumber, Endive, Gherkin, Kale, Lettuce, Early Peas, Pumpkin, Radish, Spinach, Squash, White Turnip and Swede Turnip.

AUGUST.—Sow in open ground: Bush Beans, Corn Salad, Endive, Lettuce, Welsh Onions, Radish, Spinach, Turnip and Winter Radish.

SEPTEMBER.—Sow in open ground: Cabbage for cold frames, Cauliflower for cold frames, Corn Salad, Cress, Lettuce, Mustard, Winter Radish, Spinach, Turnip and Lawn Grass. Also in October.

#### Opinions of the American Agricultural Press on Agricultural Colleges.

##### MORE LAND FOR AGRICULTURAL COLLEGE.

The so-called Agricultural College grant, which has lately been so industriously lobbied before Congress, has passed the House of Representatives, it is said, by one of those tricks so well-known to the wisecracks who make our laws. We have heretofore given considerable space to the discussion of agricultural education, and have also freely stated our views on the question. The *Hearth and Home* thus pointedly states the case in reference to this new and old grant:—

Some years ago, when the public lands were being disposed of with a free hand, a New England senator, finding that the appropriations of these lands were mainly for the benefit of the newer States, thought that the older States should have a share of the plunder and he hit upon a plan for giving every State a portion of the public territory, the proceeds of which were to be devoted to the founding of Agricultural and Industrial Colleges. As the land was to be divided among the States according to their population, the older ones came in for a fair share in the distribution; and as the object of the donation was to educate farmers' sons, or

to teach the sons of other people to be farmers, the thing had a popular aspect, and the bill passed. Many States came at once into the possession of a very large elephant. "Agricultural education! Oh! yes, of course we must have it! We wonder how we ever got along without it!" was the general feeling, and the various States set to work to realize upon their land-grants, and then to carry out the provisions of the law by establishing an Agricultural college. We do not know that any State considered the questions, "Do we want an Agricultural college at all?" or "What sort of a college shall it be?" but all went to work with the desire to do something, and the result is a melancholy array of failures. Not that all the colleges are failures, but as a whole, the entire Agricultural college system is an illustration of the folly of supplying a thing before there is a demand for it.

Now there has come a demand for more money, and a bill granting still other lands has already passed the Senate in what seems to us a most hurried manner. Before the House passes this bill, would it not be well to inquire what has been done with the money received from the grant of 1862, and if the results have been such as to warrant another appropriation of the public domain? We believe in education of agriculturists as we do in that of machinists, blacksmiths, shipbuilders, shoemakers, and everyone else, and would not appear to oppose the simplest public provision for the education of farmers' sons. But we think this is a proper time to inquire how the money has been used. Not to go outside of our own State, we find that the share of the national grant coming to New York was turned over, under certain conditions, to Mr. Ezra Cornell, to found a University which should perpetuate his name. New York's portion was 990,000 acres of land.

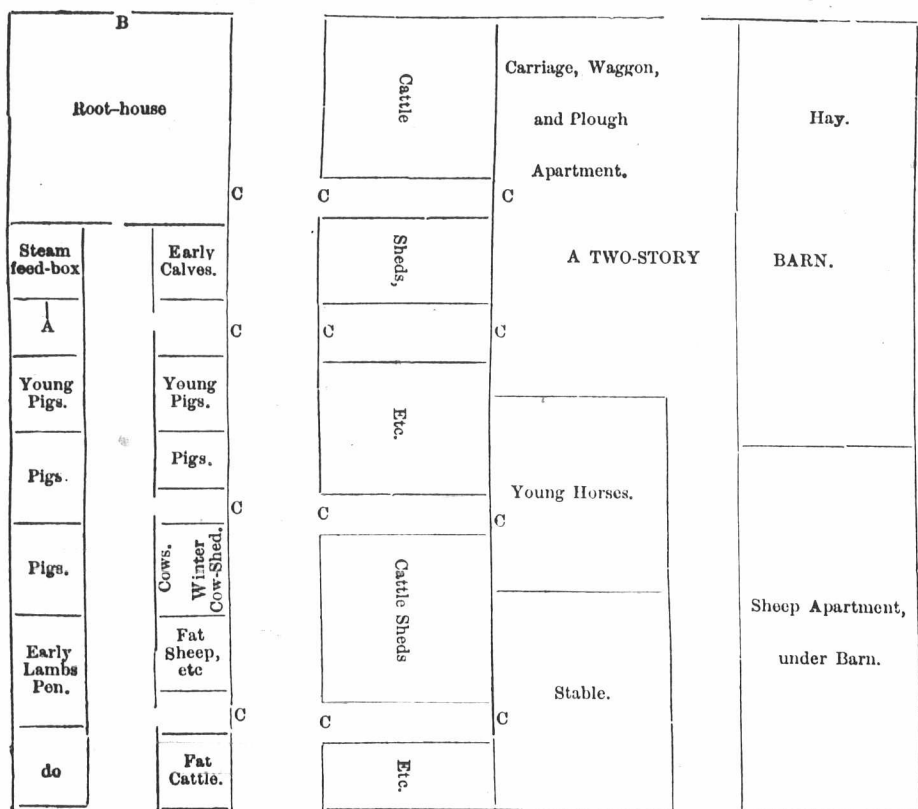
The Register of Cornell University shows that there are in all departments four hundred and ninety-four students, and in the classification it appears that of this number fifteen are agricultural students. Here is the great State of New York, which, second to none as an Agricultural State, or in the intelligence of its farming community, sends only fifteen of her sons to study agriculture at Cornell. If there were not something wrong about the whole matter, each township in the State should furnish as many students. What the matter is, we will not now discuss, and we select Cornell in no invidious spirit, but because the figures happen to be at hand. We have no doubt that the statistics in other States will show that it is worth while for Congress, before it appropriates more lands, to ask what has been the use made of the former grant, and whether it is worth while to force Agricultural Colleges upon a people who have not yet shown that they require them. The subject is one presenting many aspects, only one of which has been hinted at in the present article.

An account of Cornell University, in the report of the department of agriculture for 1869, which was evidently prepared by some one familiar with the subject, states that a large portion of the land-scrip has been favorably located, and that the estate at that time belonging to the college was valued at \$2,500,000. This is exclusive of donations from Mr. Cornell and others. The State of New York then has given to Cornell University its portion of the national grant, valued at \$2,500,000. In the way of agricultural education we have to show for this fifteen students. The income on two and a half millions should be \$175,000 per annum, and this, among fifteen students, will be over eleven thousand dollars a year to each one. We merely put the statement in this form to show what is done in New York for agricultural education, and as an indication of what might have been done had the fund been differently disposed of.

##### THE COLLEGE LAND GRANT BILL DEFEATED.

Every right-minded farmer in the United States will feel rejoiced at the final defeat of the College Land Grant Bill in Congress. We have heretofore called attention to the matter editorially, and have quoted from such of our contemporaries as have fought the iniquity that was so persistently lobbied by certain agricultural college professors, in their own interests, and which at one time we anticipated would become a law through the trickery of a member. Later we feared it would be run through in an "omnibus" during the hurry incident to the close of the session. Perhaps the astounding corruption brought to light during the present session has made our Congressmen careful for the present. The Bill will undoubtedly be brought up again; if so, the lobbying of professors and regents will be spotted.

Those agricultural colleges that are doing their duty should be fostered, and the States in which they are situated can well afford to do so. Speaking of the defeat of the Bill, an agricultural contemporary naively wants "such a showing up of the monstrosity that no future Congress will entertain it for a moment." That is the next thing to locking the stable door after the horse is stolen, but better late than never,—*Western Rural*.



laid great weight on both these points in giving their decision.

I would like to hear the opinion of good, experienced farmers on the question of manuring in the fall, or allowing the manure to mix with the soil for a length of time before planting, or placing the fresh manure in the fresh opened drill, right under the plant. The best crops of turnips ever I saw raised at home or in this country, were the green-topped Swede. It is a fine, large turnip. The fly does not ravage half so much on it as on other varieties of the Swede. It pushes out a strong leaf, much like the Yellow Aberdeen, and when it arrives at maturity the leaves cover the whole ground. It greatly improves the land, much more than any other turnip. You can't think the effect this first of turnips has on the soil—leaves it as mellow and as rich as you please. It throws off a large crop of leaves—a treasure in themselves if properly used. If they are put to use about in your straw stock or your straw in your straw loft, you may expect to have something your cattle will thank you for through the winter. Try it. As to storing, I hope yet to have a good root house and cook house and pig house, all under the same roof, with a store overhead for all my chaff, bran, chopstuf, corn, and, above all, flaxseed bowls. Every farmer should sow from an acre to two of flax every year for the seed alone; save it dry in the bowls. This is the stuff to mix on top every charge in your steam feed box. Men along the Humber, in England, can pay \$20 per acre, and raise flax for the seed alone, and make no use of the fibre. I ripped and saved the bowls of seven Irish acres every year in the old country. Then have a good steam box, fill it up

Cattle." A few extracts from his speech might be advisable. He classed the breeds of cattle of this country as follows:—First—Our own native breed, because they are accustomed to our climate and the usage cattle generally receive in this country. If we were to lose all our breeds but one he would rather have that one native than any other. He thought that on the whole the natives would yield the general farmer the most profit. As second he would place the short-horns. Thought a cross between the natives and short-horns never amiss, but advisable at all times and in all places. Third—The Devons; fourth, Galloways; after them the Hereford, Ayrshire, Jersey and Alderney. He thought the system of deaconing calves, as in Norwich, a bad one, because we do not raise some calves, but when the majority are deaconed we do not select good bulls, because we do not think it worth while to support good bulls when we raise so few calves. When we have a cow that is rather an extra milker we should raise her calves and see that they were got by a good bull. On the other hand, all calves from an inferior milker should be deaconed or vealed. He said it used to be considered sufficient for cattle to find shelter on the lee side of the barn, fence or straw-stack, but now we find them mostly in stables. Thought that in pasturing cows should have the run of the whole field, and not be changed about from one field to another. Breeding he considered one half and feeding the other half.

After Mr. Ray several members spoke, and from them some good ideas might be gleaned. W. S. Moore said in breeding for milkers he would not only look at the cow stock but also at the bulls. He said that if a calf is forced it