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Agricultural Journal.

PRACTICAL AGRICULTURE.

[We continue our extracts from an article in Blackwood's Magazine, being a review of 'Stephen's Book of the Farm.']

Among the more immediate symptoms of lambing, there are two which have struck us as very interesting. We have put them in italics in the following quotation :—

"The more immediate symptoms of lambing are when the ewe stretches herself frequently ; seperating herself from her companions ; exhibiting restlessness by not remaining in one place for any length of time ; lying down and rising up again, as if dissatisfied with the place; pawing the ground with a forefoot ; *bleating as if in quest of a lamb ; appearing fond of the lambs of other ewes.*"

The planting of potatoes, as we should expect in a practical work of this kind, is treated of in considerable detail and with much judgment. Upon seed-potatoes, which have these last two or three years attracted so much attention, we have the following passage :—

"I have no doubt, in my own mind, that were seed-potatoes securely pitted until they were about to be planted,—not over-ripened before they were taken out of the ground,—the sets cut from the crispests tubers and from the waxy end,—the dung fermented by a turning of the dung, hill in proper time—led out to the field quickly spread, the sets as quickly dropped on it, and the drils quickly split in the manner represented in fig. 411, and described in (2411,) there would be little heard of the failure even in the driest season,—at the same time, the precaution of obtaining seed frequently from an elevated and late district compared to where the seed is to be planted, should not be neglected."

A true farmer will have his eyes about him wherever he travels, and will carefully study the merits of the rural customs of every district he goes to. There is much truth in the following remarks :—

"Summer is the only season in which the farmer has liberty to leave home without incurring the blame of neglecting his business, and even then the time which he has to spare is very limited. There is only about a fortnight between finishing the fallow, the turnip and potato culture, and hay-making, and the commencement of harvest, in which the farmer has leisure to travel. This limitation of time is to be regreted,because it is proper that he should take a journey every year, and see how farm operations are conducted in other parts of the kingdom. An excursion of this nature is seldom undertaken by a farmer, who is generally a man capable of observation, without acquiring some hints which may induce the adoption of a practice that seems good, or the rejection of one which is bad. Such a journey exhibits mankind in various aspects, and elevates the mind above local prejudices ; and as husbandry is a progressive art a ramble of a week or two through different parts of the country, cannot fail to enlighten the mind of the most experienced farmer much beyond any thing he can observe by always remaining at home."

We quote the following passage from the chapter on *fertilizing the soil by means of manure*, as containing much good common sense :—

"Dung is applied at the commencement of every rotation of crops with the fallow green-crops, and with bare fallow ; and when applied at any other time, it is near the termination of a long rotation. A rule for the quantity of farm-yard dung to be applied according to the length of the rotation, as given by Dr Conventry, is, that five tons per acre are required every year to sustain the fertility of soil; and, therefore, land which is dunged every four years in a rotation of four courses, should receive with the fallow-crop twenty tons per acre ; in a five-course shift, twenty-five tons ; in a six-course shift, thirty tons, and so on. These quantities constitute, no doubt, a sufficient manuring to ordinary crops ; but it appears to me to be reversing the order of propriety, to give land under the severest shift—a four-course one—the smallest modicum of manure, when it should receive the largest ; for there is surely truth in the observation, that land grazed with stock becomes ameliorated in condition—actually increased in fertility. A sixcourse shift, therefore, having three years of grazing, should require less instead of more manure even at a time than a four-course one on land of similar quality."

MEETINGS IN ALBANY.

THE BEST MEANS OF ADVANCING THE AGRICULTURAL INTEREST.

Mr. Howard, Assistant Editor of the Cultivator, after speaking of other causes of the depression of agriculture, and suggesting means for improvement, remarked that the prevalence of an inveterate habit of carelessness and negligence among farmers, in his opinion constituted a very great obstacle to improvement. Pass through the country, and we to plainly see the evidence of the existence and consequences of this habit. We see this in the neglected fences, badly arranged farm-buildings and barn-yards—and in the trees and fruits of the garden and orchard, destroyed, by the caterpillar and curculo.

In offering a remedy for this, Mr. H. would proceed as he should do in attempting all other great revolutions : that is, he would begin with the *rising generation*. He would endeavor to enlist the feelings of the boy, at an early age, in the business of his future vocation—would induce him to bring the MIND to aid the hands in the prosecution of his labors. Teach him habits of observation and reflection. Especially induce in him the observance of systematic rules in the laying out and management of his business. Induce him to adopt as a motto, the advice of FRANLIN to his young friend : "Lay down a little PLAN for yourself, and all your operations will become easy." Let him study the principles of his art—trace effects to their causes, and from well established truths be able to draw correct and useful inferences. Permit him not to imbibe the idea, heretofore too common, that the profession of agriculture is a menial drudgery, fit only for the ignorant and degraded ; but show him that it is a noble calling, where the powers of the mind may find full scope, and in the study and practice of which, the mysterious and most beautiful operations of nature are unfolded to view.

Mr. H. would particulary encourage boys in reading books and papers on subjects connected with agricultural pursuits. The school libraries may furnish to all our youth an excellent medium for obtaining useful reading of this kind. Excite in them, if possible, a habit of reading books on natural history. Provide suitable rudimentary works on entomology and botany. As the boy studies these, stimulate his interest by permitting him to combine the knowledge there obtained, with his every day business. When, in his field labors, he meets with a worm, a moth, or a beetle, let him put it in a box carried in his pocket for the purpose. On returning home, he wil find out its name and character, and give it its poper place in his entomological cabinet.

Mr. H. thought the establishment of a MODEL and EXPERIMENTAL FARM, under judicious management, would be a very effectual means of advancing the agricultural interest. He urged this matter with much earnestness, and advanced various arguments in favor of such an institution. Its great design and object should be the decision of doubtful points in husbandry and rural economy. There, the various breeds of animals might be subjected to an impartial test, and their relative value for specific purposes, fairly made known. Theories, deducible from experiments in the laboratory,are being every day thrown before the public. These, would there be subjected to the test of field culture—*nature's laboratory*—and without such tests, they could never become safe guides to the farmer. These points will never be decided by individuals acting in their ordinary capacity. Some persons are incapable of conducting experiments in such a manner that correct inferences can be drawn from them. Others cannot afford to risk time and money upon uncertain results : and others are so biassed in favor of some favorite theory,as to preclude the possibility of arriving at the true result of an experiment. An establishment conducted by competent persons, with a single eye to the development of TRUTH, would be liable to none of these difficulties or objections.

The appointment of an *agricultural missionary*,or lecturer,Mr. H. said,would, as he believed, be an important auxiliary, in connection with other means, of advancing the cause of agricultural improvement. We may find in other countries an example in point. Mr. Blacker of Ireland, and Prof. Johnston of Scotland, have rendered very important services by their labors of this kind. It was not to be expected, perhaps, that an individual could be found for this business, whose opinions were in all respects so perfectly orthodox that no one could possibly make any objections to them ; nor was it necessary that a lecturer of infallibility should be procured. The great benefit which would accrue from his mission and exhortations would be the stimulus given to study and investigation. Farmers would be aroused—they would devote their thoughts to their business—an examination would be commenced, to ascertain the truth of any new doctrines which might be promulgated ; and the result could not fail to be beneficial.

Dr. D. Lee, of the Assembly,observed, that Sir Humphrey Davy had defined Science to be "refined common sense." Dr. L. thought the use of this "science," or this form of "common sense," would greatly advance the agricultural interest. He thought the farmer should be better educated—especially, that he should have more of that kind of knowledge which would enable him to reap a better return for his labor—would enable him to keep more of what he earns. Ten days' work of the farmer. Dr L. said frequently did not bring him more than one day's work brought the lawyer. He thought the diffusion of knowledge, of the *right kind*, would tend to equalize the value of labor—would advance the interest of the farmer as well as the whole community.

The meeting was further addressed by Mr. Betts, member of the Assembly from Rensselaer county, Judge Leland, of Steuben county, Mr. McVean and Mr. Young of the Assembly, and by Judge Cheever.

Judge C. thought the benefits of agricultural societies had been undervalued. It was a great misfortune to the agricultural interest, that farmers did not act sufficiently in concert. The people of other classes saw the benefits of association, and they so combined their forces that their action was felt. Their influence on the policy of government was obvious. Now he would arouse farmers to the importance of protecting their interests—he would have them united and firm in claiming of government their rights—the government should know that their voice is not to be unheeded.

THE BEST MODE OF MANAGING AND APPLYING VEGETABLE AND ANIMAL MANURES.

Dr. Lee opened the discussion by remarking that by the term manures, was understood any substance that might serve as food for plants. The food of plants was derived partially from the soil and partly from the atmosphere—from the soil by means of the roots, from the atmosphere by the leaves. If it be an organized substance, it must undergo decomposition. For instance, one spire of grass cannot enter into the composition of another spire—it must be dissolved. It is most important in the preparation of manures, that while this decomposition should be thoroughly performed, none of the manure should be lost. It is for this purpose that compost heaps are made. They promote fermentation and decomposition, by which new affinities are formed. In the ordinary preparation of manures, large portions are dissolved and lost in the shape of gases—in consequence of exposure to the atmosphere. Other portions are lost by leaching—from want of shelter from rains and snows. This should not be so. They should be carefully sheltered, and the gases absorbed and retained by a covering of charcoal, peat, or other absorbing substance. In regard to the preparation, there were a great variety of opinions and practices. The first object,however, was to promote a decomposition. This was sometime done by putting water upon the compost heap to induce fermentation ; which generates much that—especially in the winter. Compost heaps were all serviceable to absorb the liquid excretions of animals, which are liable to be washed away.

Mr. J. B. Nott thought the farmer must rely mainly for the present and probably for some time to come on the manures of the barn-yard. And it should be the object, in the first place, so to manage these manures that nothing may be lost. We should not allow its strength to be taken from it by frost and snow, to be drained off by rains, or dissipated by the winds. The fermentation of manures is often allowed to take place in such a manner that the most,valuable portion is carried off, and it becomes nearly worthless. It has been well said that no farmer ever smelled his manure, without witnessing a waste of his property. The question had been raised in regard to the propriety of composing manures. It was the opinion of the late Judge Buel, and also of some other distinguished farmers, that the practice was useless. It was argued that the richness of the manure was lessened by fermentation. But there was one great disadvantage attending the use of long manure, and that was the seeds of weeds, &c., which would vegetate in the land, and annoy the farmer. Fermentation in the compost heap would destroy most of these seeds—and cannot this fermentation be so conducted that no loss will accrue to the farmer ? The "best method of applying manures," is an important question. He had some experience, and had endeavored to observe the effects of different modes. He had come to these conclusions—that it was not proper to bury them very deeply, not to leave them entirely uncovered. His soil was rather sandy, and plowing in manures to 6 or 7 inches had generally been attended with comparatively little benefit, but when they had been covered 2 or 3 inches, the greatest good had been produced.

Mr. Sotham agreed generally with Mr. Nott in regard to the mode of applying manures. But perhaps one reason why that gentleman had supposed there was but little benefit to be derived from plowing in manures, was, that he did not wait long enough for the manure to be decomposed. He thought plowing in long manures, for a tenacious soil, was highly beneficial. The soil is thus rendered more friable and adapted to the circulation of the roots of plants.

Mr. S. would briefly state his mode of managing barn-yard manures. He mixed various kinds together, in the following manner. First, he put down a layer of manure from the cattle-stalls ; next, a layer from the horse-stables, and next a layer from the slaughter houses—then the kind first used, and so on alternately till the pile was raised as high as convenient. In this situation it underwent a moderate fermentation, and when it was carted away for use, it was so cut down that all various ingredients were mixed well together. He thought it very important that all animal manures should be saved, for they undoubtedly contained all the organic elements of plants—carbon, hydrogen, oxygen and nitrogen.

Mr. Nott asked—"When is it best to apply manure to a corn crop ?"

Dr. Lee answered—when you plant the corn. The experiment spoken of at one of our meetings last winter, by Mr. Humphrey, the Mayor,was in point. He planted some corn on a very poor, sandy soil, with a small quantity of horn shavings in the hill. The result was that where the shavings were applied, he got 60 bushels to the acre, but where the shavings were not applied, he only got 15