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By M. MACLEAN.

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AGRICULTURE.

From the Conn. Farmers' Gazette.

BEEES.

Mr. Wood.—At your request, in our late conversation, I hand you a few remarks respecting the common honey bee. This little insect has, of late years, attracted more than usual attention, and is become not only a source of very pleasant amusement, but of much profit, to the cultivator. So much more than common interest is devoted to their rearing, and the study of their nature and habits, that the bee-fever soon came to be added to the list of diseases known to medical practitioners. I have never been inoculated for it; but I think I have had it naturally, and powerfully. The care of bees is a source of much delight to me; and, tho' a formidable and repulsive insect to most persons, I have never yet had occasion to abate my habits of familiar and intimate intercourse with them. On entering my house, next to my children my bees receive my visit and attention. I am among them as unconcerned as though they were chirping sparrows; and my presence never seems to disturb or annoy them. If they fly in my face, I want till they fly off again; if, as is often the case, some heavy laden individual drops to the ground, in consequence of failing to make good his foothold, on returning to the hive, I pick him up, and put him on the plane; and somehow, little roundhead seems to know I intend to do him a favor, for I have never yet felt the sting of ingratitude, or had any fault to find with their bee-havior.

The belief so prevalent, that bees are ill-natured and dangerous, is a mistaken one. They seem always suited with judicious attention, and kind notice bestowed upon them; and I seriously doubt any predisposition in them to use the sting.—They are annoyed by the sudden starts and offensive motions of those who approach them fearfully, but remain quiet when approached boldly but moderately. Almost any thing may be done to and about them, if care is taken not to hurt them, nor offend them by any quick motions.

In the swarming season, I have known two instances of swarms issuing from two hives at the same time, and both uniting and alighting on the same branch. The swarms came from two hives twice in twelve days, at the same hour of the day, and in both cases united on the same branch. Of course there was a queen in each swarm; and when thus united they are put into one hive, and the queens decide, by duel, which shall have the supremacy. This is doubted by some; but I have had demonstration of the fact. On taking up one of these hives, [containing the double swarm.] to remove it to the apiary, a small cluster of bees was observed on the table cloth, adhering closely to some object. On dispersing this cluster, a dead queen was observed to be the attractive nucleus. She had been killed by the one in the hive, and left upon the table. A fight between two queens, was observed by an acquaintance of mine, who in relating it to me remarked that, the queens, while in the air, were kept apart for some time by the workers; but finally got together, and, to use his expression, "fought like bull-dogs," until one was killed. The other went into the hive, and all was quiet. Doubt is also expressed as to the existence, function, and government of queens. There can, however, be no question in the mind of any one who will observe or inform himself; I have seen and observed queens, and carefully noticed the different size, structure, and position of their cells, and am satisfied of their regal pre-eminence. Indeed, a swarm of bees can hardly be induced to enter a hive, unless the queen leads the way; and if they do go in, or are put in, they will not remain, unless her Majesty is there also. I once, to oblige a friend, and amuse myself, took a swarm of bees from a very difficult place, where they had had a lodgement, and bred for many years. It was a matter of doubt whether the queen could be secured, as the bees had to be hauled out, and carried down a ladder, and placed on a table at the entrance of an empty hive. It was soon ascertained that the queen was taken, and curious to see how soon, and simultaneously, every bee turned his head towards the entrance and moved rapidly into it. The greatest haste and animation is apparent, and each little fellow makes a perfectly straight march—a bee line into the hive. Here they soon settle and become composed.

The queen takes her place, and is surrounded by a guard, who keep constantly near her, and are regularly relieved; the workers immediately commence making comb; some are engaged in cleaning house, and sealing cracks; and the whole colony are soon organized, and in full activity and employment during the honey-moon.

I did not expect, when I commenced, that I should be seized with the *cacoethes scribendi*; but I hope the length of this article may not prove a serious infraction.

Very truly, A. B.

From the Southern Planter.

ON DRIVING BEES.

Frequency of occasion for driving bees. Its advantage in taking honey. A successful method of doing it.

It sometimes becomes necessary, or it may be desirable to transfer bees from the hive in which they were first established to another. Several considerations may make this expedient; the hives may become damaged or decayed, as for example, when barrels are used for the purpose, as is very usual, exposure to damp and the action of the sun, occasions the staves to warp and the hoops to burst asunder. It is equally necessary when the hives become infested with the bee-moth, or worm. In either case the honey will be lost and the bees perish, unless secured in a better habitation.

The barbarous and wasteful practice of suffocating or destroying the bees for the purpose of taking the honey, would also be abandoned, if it were generally known with what facility bees may be driven from one hive to another. If this be done at a proper season, say about the first of July, all the honey in the old hive may be saved, and time will be allowed them to make ample provision for support through the winter. Having succeeded in all my attempts at driving bees, I now propose to make known, for the benefit of those interested, and with a view to the preservation of this industrious and valuable little insect, the simple and effectual mode of operation I have pursued, premising that the only difficulty I have experienced is not in transferring them from one hive to another, but in reconciling them to their new habitation. The new hive should, therefore, be scrupulously clean and sweet. This, however, all know to be equally necessary in taking a new swarm. Having determined on the hive to be driven, place on the ground in front of the stand on which it is fixed, and within eight or ten feet of it, a box, block, or an empty bee hive twelve or eighteen inches high. By the side of this, the most remote from the hive, kindle a small fire, using scraps of old dry leather, old worn out shoes will answer, as the principal article of fuel; provide a sufficient quantity of cut grass, damp straw, hay, or green Spanish moss, in order to keep down the blaze and produce as dense a volume of smoke as practicable. This done, remove the hive from the stand to the box near the smoke, placing the new hive immediately on the same spot on which the old one stood; then remove a part or the whole of the top or head of the hive to be taken and place it in such a position that one third or half of it may project over the side of the box on which it is placed, and as nearly over the smoke as can be done conveniently. By placing a short piece of plank on each side of the fire and in connection with the box, on which the hive stands, the smoke may be readily driven through the hive and with it the bees. These, as they escape from the old hive, direct their flight at once to the stand from which they were removed and take refuge in the new hive placed for their reception. The whole operation is performed in a few minutes. This is best done on a damp drizzly day, or about twilight in the evening.

HOW TO PRESERVE SWEET POTATOES.

To the Editors of the Tennessee State Agriculturist.

Gentlemen: I have for some time thought I would give to the world, through your useful paper, the knowledge of preserving Sweet Potatoes, which I consider a very delightful and healthy vegetable, and I have seen but few persons who were not fond of them. But how to preserve them through the winter, few persons have yet learned. Yes, sirs, I have known old men in North Carolina, and even in Tennessee, who knew nothing about keeping them, so much so, that some have been deterred from making them. But I consider them as easily kept as a Turnip, if they are managed right. The secret is a simple one. All secrets are simple when revealed, but it requires time labor and experiment, frequently to discover them. Therefore, we do not meet with many revelations, as it is much easier to speculate than experiment.

Well, sirs, I lay the whole stress in digging, before the frost, and after they are dug, put them up with dry dirt, sifting it from a shovel or spade upon every layer of Potatoes, until the cellar is full, or as near full as you wish, using the precaution not to cover them too deep on the top until the cold weather sets in, and then make them secure by putting straw or hay on, so as to keep the cold air from them,

and never open your cellar when the weather is very cold, until about twelve o'clock, or the warmest part of the day, and according to my experience, they never have failed to keep. Potatoes always spoil in four or five days after they are first cellared, if they spoil at all unless they should get wet afterwards. In the spring, take off your covering of straw, or as soon as the cold weather has subsided, which will keep them from sprouting in some degree.

Respectfully,

JOHN P. SLEDGE.

Davidson Co. Sept. 1842.

From the Connecticut Farmers' Gazette.

A NEW METHOD OF GRAFTING APPLE TREES.

Plant the seed in rows, at a suitable distance from each other, and the hills say about five feet apart in each row. But one tree should be suffered to grow in a place. Now when the young tree is sufficiently grown, in the Spring of the second or third year, any quality of fruit may be grafted into it in the following manner. First, bend the tree over and obtain for it a firm resting place, either on a block or a board resting on the knee, (after it has been divested of its branches,) and with a stout sharp-pointed knife pierce holes directly through the center of the tree, about five inches apart, into which the scions are to be introduced—leaving above, two or three buds. A trench is then to be dug, in a direct line between the trees, about four inches deep, and the whole tree bent down and buried—leaving the tops of the scions above ground. In this new condition, the scions become, uniformly, thrifty young trees, supported and nourished from the buried tree, from which issue, in due time, roots from its entire length. The second year from this operation, the whole parent tree may be dug up, the new growth sawed apart, and transplanted. It will thus be seen that if the tree is five feet in height, ten or twelve young trees, of whatever quality is chosen, may be obtained in this way, whereas by the ordinary method of grafting, there could be but one, provided the graft lived. The young scion will bear fruit, thus transplanted, in the same time it would had it been grafted into a tree fifteen years old.

I know not whether this process is new among your agricultural community at the North; but I have repeatedly witnessed it in Georgia and Alabama, and I have repeatedly been informed by some of the best horticulturists in those States, that it is always successful.

Yours respectfully,

HENRY LEE.

The foregoing communication of Doctor Lee deserves the attention of every farmer and gardener. It contains new ideas on the art of engrafting which must greatly facilitate the process, and hasten the production of fruit—two very important improvements for the cultivators.

ED. GAZETTE.

From the Maine Farmer.

DISEASES IN OXEN.

MR. HOLMES:—A Short time since, I was in the county of Somerset, and I heard of a number of oxen which were spoiled, by what was there, called the *stub complaint*. On inquiring for the symptoms, I found it not a new complaint to me.—From some cause or other, a sandy substance collects in the pipe or sheath, where the water escapes from the body. I had some experience before, and will relate one instance, which will give you an idea of my experience. I had a very good and valuable yoke of large oxen, one of them was affected in the manner and with the disease above mentioned, call it what you will. He appeared to be in pain whenever he passed his water, by the soreness of the part affected. I was told by a hand that worked for me, and who pretended to know, that I must fit him as well as I could and kill him, probably for early beef and make the best of him. I purchased a small quantity of the sugar of lead, took the ox down and washed and cleansed the part affected, with soap and warm water. Not liking the application in that way, I powdered the sugar of lead and faithfully applied it in a powdered state, taking care to get it as far into the sheath as it was diseased. The consequence was that the parts became contracted and healed, and he continued well for that fall and winter and the next summer, which was as long as I kept him.—When I sold him I informed the purchaser of the disease and the remedy also. He lived two or three years after I sold him. I have been told that the remedy had to be used once after I put him away.

E. Wood.

Winthrop, Sept. 27, 1842.

SURE CURE FOR DYSPEPSIA.

Of all the prescriptions for this modern prevailing disease, we know of none to compare with the following, which we are not afraid to recommend, both for its agreeability and infallibility: Go to farming on 25 acres of land, and never use alcohol or tobacco.

Con. Far. Gaz.

Cicero, in speaking of the different employments which men adopt in life, says

—“But among all the methods of enriching one's self, there is no one more profitable and pleasant, and agreeable, no one more worthy of a man, and a gentleman, than that of manuring and tilling the ground.”

To PROTECT SHEEP FROM THE GAD FLIX.—In August and September this fly lays its eggs in the nostrils of sheep, where they are hatched, and the worms crawl into the head. In this way many sheep are destroyed. As a protection, smirch their noses with tar. Lay some tar in a trough, or on board, and strew fine salt on it: the sheep will finish the operation.—The tar will protect them, and what they eat will promote their health.

From the Bridgeport Farmer.

CATTLE SHOW AND FAIR.

The first Cattle Show and Fair of the Auxiliary Agricultural Society, took place in this city on Wednesday last. The exhibition more than equalled our expectations.

The number of working cattle present was 350 pair; all from only four towns, viz: Fairfield, Trumbull, Huntington and Stratford. The competition among these towns for the premium on teams was animated and interesting. Old Fairfield took the first premium; her train numbering 150 yokes. Stratford took the second; numbering 101 yokes. The teams from Trumbull and Huntington numbered over 100 yokes each. Such a string of cattle in yokes we never saw before.—Among them, were some as fine, well matched and disciplined, as can anywhere be produced. A yoke of twins, four years old, belonging to Wm. Bulkley, Fairfield, attracted great attention. They were the prettiest and best trained pair of cattle we ever saw.

The number of stock cattle was 130 head, many of which were Durham bloods.

Extract from the letter of a correspondent of the South Western Farmer, dated Mississippi City, 8th Oct., 1842.

To DESTROY THE CATERPILLAR IN FRUIT TREES.—Pull a tuft of grass, and hang it in the fork of the tree just below the worms; they will soon all die or disappear. I beg you won't ask for the reason, because I could not give you any; try it.

To CURE YELLOW WATER IN HORSES.—Take one table spoonful of burnt copperas; 2 do. soft soap; 2 do. common salts;—mix in a quart bottle with water, and drench once a week until relieved.

To KEEP WEEVIL OUT OF CORN, PEAS, &c.—Mix with the corn, &c., as cribbed, plenty of china leaves and china berries; they will not only keep away those mischievous insects, but are an excellent vermifuge for all kinds of stock, and should be fed out with the corn in small quantities, and sheep want no other food.

CHEAP LIVING IN OHIO.

A gentleman who lately passed through some part of Ohio informed us, that the price of Eggs in the interior was 92 cents per bushel, or 2 cents per dozen; Corn 12½ cents per bushel, Oats 10. Chickens 6 cents a pair, and other poultry in proportion.—Con. Far. Gaz.

SOILING.

A writer in the "American Farmer," comparing the advantages of soiling and grazing, makes the following remarks:

"In grazing, an acre of good grass is considered necessary to each head of stock; of ordinary grass one and a half, or two acres are not more than enough.—In England, where the soiling system has been very generally adopted, and carried on with care, according to Mr. Curwen's experience, three acres of grass cut and carried, supplied 30 milk cows, with 23 lbs. each, daily, during a period of 200 days. To have supplied a similar number of cows with a like quantity for the same period, would, in the usual way of management, have required 75 acres of land for its production. And to have grazed such a number of cows at liberty that length of time, must, it is obvious, have taken a very considerable number of acres. Again he says:

"This vast produce from so small a piece of land, may at first appear very problematical; but experience and good management will soon convince the dairyman that he may realize the advantage great as it may appear. To enable the meadow to support this exhaustion from the scythe, it should be cleared at the end of every autumn, from all kinds of weeds and rubbish, and fresh grass-seeds of the best kinds, cast upon the bare places. A coat of good rotten manure, or ashes, should then be allowed, consisting of all that can be collected from the household, or procured elsewhere, mixed up and augmented with virgin earth."

"If we admit that the number of acres assumed by Mr. Curwen, three and a half to each cow, be too great, and take one, the minimum quantity named by us, as the proper one, then there will still be a saving of 27 acres of grass by the soiling over the depasturing system. And if we reserve this grass to be cut for hay, it will give a sufficient quantity to carry the cows through the winter, or folding season; so that, to this amount there will be a clear gain. Then let us add the immense quan-

tity of manure which will be accumulated in the soiling-yard, and we cannot hesitate a moment in coming to an opinion as to the relative merits of the two plans of feeding stock; for all will admit that summer made manure is very far better than that made in winter, as also that the most of the droppings in pastures is lost, by means of evaporation and rains, to all the available purposes of the farm, and no one will contend that the cost of the price of half the labor of one hand, and that of a horse and cart during the time, should be considered to be of more value than the savings we have pointed out. Suppose that, in addition to the accumulation of manure from the droppings of the cattle, the yard be covered some nine or twelve inches deep with mould or other earth from the woods, or head lands, to act as absorbents of the cattle's stable—we say, suppose this be done, and we will venture the assertion, that every square foot of such mould or earth would be so saturated with the urine of the cows as to be equally as valuable as their droppings. Thus, then, in whatever light we may consider the subject, the advantages in favor of soiling are apparent to the judgment.

It may be urged against the soiling system that it would not afford the requisite exercise to the stock. We are free to admit that exercise, to a certain extent, is necessary to the health of the brute creature, but at the same time we are free to maintain, that all that is indispensably necessary to ensure health and comfort, may be obtained in a yard of a fourth of an acre in extent, and we doubt much if regularly fed and watered therein at stated hours through the day, and salted semi-weekly, whether they would not maintain as much physical vigor thus confined, as they would roaming at large in a pasture of many acres. It is questionable with us also, whether they would not yield fully as much if not more milk and butter.—At all events, the experiment is worthy of a trial, and we, therefore, commend it to our readers' consideration."

From the S. W. Farmer.

Durable Peach Trees.

GENTLEMEN: Would not the discovery of a method whereby our finest and most delicate peach trees could be made three or four times as durable as they are, be a desideratum? It is not often the cause of the neglect of this delicious and valuable fruit that the trees are at the best short-lived and often perish before they will arrive at maturity? The causes of this are found the most part in the breaking of the trees from too abundant production, and from the grub which penetrates the tree at the surface of the ground. Where these can be prevented, it is probable the peach tree may live to a good old age, and till many generations of its descendants may spring up and multiply and shed forth their honors around it.—Among the many methods for accomplishing this purpose, I know of none more certain or valuable than grafting your peaches upon stocks of the wild plum tree of our forests. It is certain that the peach graft or bud readily unites with the wood of the plum and forms a strong and healthy union with it. The plum is a hardy and durable tree, enduring changes and treading or accidents with less injury than most others. Its root is never invaded by the grub or other noxious animal, and possesses a strength and firmness equal to sustaining the top of any peach tree that will grow upon it.

The best method, perhaps, of securing an orchard of such trees would be to plant a nursery of the seeds of the wild plum and cultivate the trees nearly as we would cultivate cotton. In the summer of their second year, most of them might be inoculated with choice peaches, about six or eight inches from the ground. In two years more they would become bearing trees and yield abundance of fruit.

Among other advantages of such an orchard, we name the following:—1st. The trees will be exceedingly durable and healthy. 2d. They will be far less liable to break from over bearing. 3d. Unless the proprietor were very negligent he would have a valuable variety of kinds ripening at different and desirable times.

Iterum,

A. B. L.*****

N. B. The wild plum forms an admirable stock for all varieties of plums, apricots and nectarines.

From the Cultivator, Sept. 1841.

Pine Sawdust—Inquiry.—Mr. White, the owner of an extensive steam saw mill near Jackson (Miss.) inquires "whether pine sawdust has ever been applied as a manure; with what benefit; and to what description of soils it would be most serviceable?" He says:

"We have large quantities both of sawdust and ashes; would a mixture be beneficial? There are some low grounds on our place of heavy, tenacious clay, as yet unopened. Could it by ditching and applying the sawdust alone, or combined with ashes, be rendered serviceable in a year?—The ashes we have will prove an invaluable manure to the most of our land as we get it opened, which is generally a light sandy loam. Hence a desire for preserving them for that purpose. The sawdust will shortly become a nuisance, unless it can be made useful as a manure. Under any circumstances, it is my intention to make some partial trials with it, but if it has been successfully employed, he would like to know it, in order to avail myself of other people's experience. The point I wish to get at more than any other, is, would the application of this description of dust, before rotting, be injurious to the land?"

Sawdust applied to soils would at first act mechanically, by rendering them less tenacious and more friable; and when rotted, would be the same as any decayed vegetable manure. There can be little doubt that on heavy clay lands, especially when drained, a dressing of sawdust would be

useful, both in lightening the soil, and eventually as manure. At the north, sawdust of all kinds is highly prized, but its great use, is to put in cattle yards or pig pens, to absorb the liquid parts of the manures, and have the acid, all woods contain more or less, corrected by the alkaline salts existing in such places. Mixed with animal manures in this way, it forms one of the best applications that can be made to land. A mixture with ashes, as alluded to by Mr. W., would correct the acidity, but it is probable the beneficial effects of the ashes would be more apparent on the light than on the heavy soils. Pine sawdust, as such, we have never known used extensively, but should have no fears of applying it to any land where it could be of use in rendering it more friable at first, or valuable as decayed vegetable matter afterwards. We should advise Mr. White to use as much of his sawdust as possible in his cattle and hog yards, to be trampled upon and saturated with animal matter, and the rest, mixed with ashes, put on such of his heavy lands as he can drain and open. The experiments, however, upon which Mr. W. is entering, will decide these questions more effectually than any theory.

Sawdust.—A. W. L. of Hempstead, L. I., in a communication says:

"My predecessor was in the habit of putting large quantities of sawdust, straw, &c., in his pig pen, let it get thoroughly incorporated and rotted, and then use it as a manure. On the purchase of the place last spring, I found on it a quantity of this sawdust manure, horse manure, and long manure; which three kinds I separately put in different parts of my corn field. The result is this: the part with long manure is very poor, (by the way would not podrette help it?) the horse manure good, and the sawdust first rate."

This method of using sawdust has been practiced by the shakers with great success. Rotted sawdust of itself would be a good manure, but put in a pig pen it not only decays, but it absorbs and retains much of the most valuable part of the manure, that would otherwise be lost. Of the great value of hog manure for the corn crop there can be but one opinion. It is decidedly superior to any or all of the manures for this crop, and a farmer should use every exertion by frequently replenishing his pig pen with refuse matter, to increase the amount, or prevent waste.

Feeding Poultry.

Professor Gregory, of Aberdeen, in a letter to a friend, observes, "as I suppose you keep poultry, I may tell you that it has been ascertained, that if you mix with their food a sufficient quantity of egg-shells or chalk, which they eat greedily, they will lay, *cateris paribus*, twice or thrice as many eggs as before. A well fed fowl is disposed to lay a vast number of eggs, but cannot do so without the materials for the shells, however nourishing in other respects her food may be; indeed, a fowl fed on food and water, free from carbonate of lime, and not finding any in the soil, or in the shape of mortar, which they often eat off the walls, would lay no eggs at all, with the best will in the world."

Recipe for Corn Beef.

Put into a cask twelve quarts of salt, twelve gallons of water, and one pound of saltpetre; stir it until all is dissolved—salt your meat well in a separate tub, let it stand ten days, then put it in the brine with a large stone on to keep it under. The brine will keep three or four months.—Ed. Planter.

MURRAIN IN CATTLE.

To many persons it will no doubt seem strange, to consider the origin of the two disorders, so very different in their appearance, symptoms, and effects, as the botts and murrain, as arising from the same cause—namely, indigestion; but, as I conceive that they are engendered by a disordered state of the stomach, caused by sour and unwholesome food, and that they might both be cured, or which is better prevented, by timely administration of a medicine, alkaline in its nature, I believe that reason will bear me out in the conclusion to which I am partly led by perusing an article on this subject in the Cabinet, where it is said, (quoting from the American Farmer.) "Some years since I purchased a horse, but I had the appearance of laboring under disease. I commenced a course of treatment which I had before pursued in cases similar to appearance, but without effect. I was therefore induced to try the use of lime, as I was confident he was filled with botts, for he had discharged several. I therefore commenced by giving him a table-spoonful of slaked lime three times a week in bran mashes. After pursuing this course near two weeks, the botts began to pass away in quantities, varying from ten to twenty, which he would expel from his intestines during the night. In the mean time his appetite began to improve, and in six weeks he was one of the finest geldings I ever saw. From that day to this I have kept up the use of lime among my horses, with decided benefit; and, as an evidence of its good effects, I have not lost a horse since I began to use it. And lime is a certain preventive in keeping cattle from taking the murrain. As an evidence of this fact, I have used it among my cattle three times a week, mixed with salt, for three or four years; and in that time I have not lost a single animal by this disease; but, in the mean time, some of my neighbors have lost nearly all the cattle they owned. But I will give a stronger case than even the one above mentioned. One of my neighbors who lost his cattle, had a friend living within two hundred yards of him, who had several cattle which ran daily with those that died, and his cattle all escaped. He informed me that he made it an invariable rule to give his cattle salt and lime every morning. I have, therefore, no doubt but salt and lime are a sure and infallible remedy for botts in horses and murrain in cattle."

And I am reminded of a circumstance by a friend, who has often before mentioned it. He had two fields of pasture near his house. On one of these he spread lime upon the turf to the amount of more than 200 bushels per acre; but, as the other field lay immediately below his cattle-yard, from whence he had formed drains to carry the water over its surface in the most complete man-