

THE TEST OF THE NATIONAL WELFARE IS THE INTELLIGENCE AND PROSPERITY OF THE FARMER.

Every farmer in his annual experience discovers something of value. Write it and send it to the "Agricultural Editor of the Democrat, Bellefonte, Penna." that other farmers may have the benefit of it. Let communications be timely, and be sure that they are brief and well pointed.

We hear loud complaints of the ravages of the cut-worm in the corn fields; and on our own farm find them in great numbers, and much larger and fatter than usual. Who can account for the increase this year?

Mr. Jacob Deitz, of Howard township, set some two hundred Bartlett pear grafts for us this spring, and very nearly all of them are growing finely. This is a gratifying evidence of the skill and care which characterizes all Mr. Deitz's work of this kind.

We notice an unusual increase in number among insect pests this summer. Potato lots near by those which last summer were comparatively free from the attacks of the "bug," and which were carefully kept clean, are literally swarming with them, while "bumble bees,"—big enough to be mistaken for a small bird, and with "hummers" that rival the fog-horns of the coast,—are as abundant as grasshoppers in harvest. Is this a possible result of the dry season?

A REPORT comes from Georgia that a new and entirely unknown disease, of a malignant and very fatal character, has broken out among the cattle in the southern part of the State, and is spreading with great rapidity. So far the disease defies all remedies. State Commissioner of Agriculture, Hon. Thomas P. Janes, who, by the way, has qualifications for the position which ought to locate him at the head of the Department at Washington at an early day, has already begun investigations, with the hope of finding what the disease is, and the method of cure.

A CALIFORNIA correspondent of a Philadelphia paper tells strange stories of the failure or straightened financial circumstances of all the great wheat producers of the West,—Dr. Glenn, the Dalrymples, and so on,—and says that farming on a gigantic scale on the Pacific coast must be considered a failure. If farmers raising from half a million to a million bushels of wheat each year cannot keep out of debt, what is the use of having so much land? Wouldn't it be just as well for all concerned, producer as well as consumer, to divide up a little?

We must be prepared to hear shortly that American sheep are subject to no end of hideous diseases, and that the use of American mutton is hazardous in the extreme. The exportation of sheep to England increases rapidly since the "lung-plague" scare has checked the trade in beef cattle, and the profits of English breeders are seriously threatened. Something will have to be done; and we shall not be surprised if an epidemic of tape-worms, or something equally distressing, is soon reported among eaters of American mutton. It is not possible that American sheep can be wholly exempt from the numerous maladies to which all flesh is heir—when exported!

It may have been true that there was "fiothing new under the sun" when the statement was made, but that was before the days of alleged professors of agriculture. Here is one "Prof." Farrington, for whom the State of Maine is responsible, who has, in a nine years experiment, discovered that a given amount of raw meal fed to pigs will produce 17.5 per cent. more pork than the same amount of meal cooked; and that the application of \$50 worth of barnyard manure per acre will give an average return of but \$18.62 in increased crops. It is very evident that among the crying needs of Maine agriculture are either improved cooking apparatus and richer manure piles, or an improved "Prof. of Agriculture."

At last spring's shearing time we discovered our little flock of sheep (we had purchased them only the previous fall, never having kept sheep before,) to be nearly eaten up with "ticks," but in the course of a day or two found that the vermin had all left the old sheep and massed themselves upon the lambs, whose longer wool afforded them better hiding places. Upon consulting the authorities we found "tobacco dip" recommended. So, begging an armful of "stems" from a neighbor who raises it, we made a tea as strong as we thought the lambs would bear, and carefully and thoroughly dipped each one in it. We have just sheared our sheep for this season, and found less than an average of one "tick" apiece for the entire flock. That's one thing tobacco is good for.

The dry, cold weather of early spring, succeeded by the drouth and heat of the later weeks, has been a trying time to all crops. The universal law of compensation holds good, however, in farming as in everything else, and this same dry, hot time is spendid for killing weeds. Keep the cultivators going, and improve the opportunity; and at the same time, by keeping the ground loose and mellow, you will do more to counteract the influence of the drouth than can be done in any other way.

[Since the above was written the blessed rain has come, and as it pours and soaks, bringing comfort to "all the inhabitants of the earth,"—merchant and banker as well as farmer; beast and bird as well as man—we are reminded of the promise that "while the earth remaineth seedtime and harvest shall not cease."]

When Shall We Cut Our Hay?

The question of which is best, early or late cut hay? is a much mooted one, and there is a wide disagreement upon it in actual practice. We imagine, however, that this often due more to the convenience or inconvenience of the farmer than to his convictions on the subject. The preponderance of opinion, on the part of those whose opinions are most entitled to credit, seems to be in favor of early cutting. We give extracts below from two good authorities, the American Agriculturist, and Farm Journal:

The object of the haymaker should be to seize on that particular period in the growth of the plant when it contains the largest amount of nutritive matter, and this is when the plant is in full bloom. Every hour that clover is allowed to stand after it has reached this point is at the expense of its nutrition, and if not cut until ripe, the stems have become so hard and woody as to be but little better than so many sticks. It has long been supposed that early cut hay is more valuable than that cut later. If the judgment of the cows were a test, there would be no question about it. They will leave the ripener hay, and even refuse to eat it at all, if they can procure that which has been cut earlier. In the writer's dairy, the milk falls off more than 10 per cent. when the young hay is changed for that cut two weeks later. This is sufficient to support the general opinion in spite of chemical analyses, which go to show that the ripe hay is heavier, more bulky, and contains more nutritious substance, than that cut earlier. Perhaps the operations of the chemist can extract more nutriment from ripe hay than can the cow's stomach; but as young hay feeds more profitably, it seems best to cut early.

Last season the Solebury farmers' club discussed this question. Oliver Balderston was in favor of early cutting. One advantage in cutting young was the weeds would not ripen their seeds, and would shrink up so as not to be noticeable. He thought there was not as much waste as generally supposed by drying out in young grass. The bulk might be lessened, but little would be lost in weight, and there would be a gain in quality. W. P. Magill thought early cut hay was better, and there was much less draft on the soil if cut before the seed ripened. He had noticed that where hay was cut late the stock invariably came out in poor condition unless much grain was fed. W. W. Paxson instanced a farm where the hay was always cut early, where little grain was fed and the stock always came out in good condition in the spring.

"It is not denied," says Mr. Eggle, from whom we before quoted, "that all grasses will make a larger bulk of hay, if ripe when cut, than if cut when more tender, but the difference in weight (if any) is very little compared with the difference in bulk, while the latter is as much superior as hay as it had been for pasture or soiling. This applies emphatically to milch cows. Not only will they give more milk from hay made from tender grass, but the butter will be high colored. In order to secure hay of the best quality, such as will make most milk and butter and keep animals in good condition, cut grasses when they contain the largest amount of saccharine matter; cure, if possible, without too much hot sun; get it dry as evenly as possible, and gather it as damp as it will allow without mow-burning, and you will have all that can reasonably be desired for good hay."

Another reason for cutting early is that it gives the second crop a chance

to spring up and cover the ground before the hot, dry days of mid-summer, furnishing a better sod for the following year's crop.

"Another very important point in cutting clover early is its effect upon the land. It has been proved by actual experiments, extending back for the last quarter of a century and more, that plants removed from the land in the earlier stages of their growth exhaust the soil but little, the roots containing nearly all the elements of nutrition the plant took from the soil, but after the seed has formed, nearly all the soil elements go to the formation of the latter."

Chickens Indoors.

By Colonel F. D. Curtis. For years we have tried to raise chickens, or at least give them a good start indoors, in a granary bin or on the barn floor, but they invariably became sickly and did not do well. Last year we tried large roomy boxes out of doors and let them have a run on the ground, but when a rainy time came they used to get wet and drabbed and chilled, and then they would die. This season we went back to the indoor practice and tried the experiment of putting a small heap of sand, about four quarts, in one corner of each apartment where we put the young chickens; result, a perfect success. We have not lost one chicken. The truth is, the little chicks lacked the fine gravel which was an indispensable aid in the digestion of their food; getting this in the sand and being warm and dry they have done well.

For eight years we have constantly practiced Col. Curtis' method of starting chickens, excepting that we use fine gravel mixed with sand, and every day or two throw a square of fresh sod to them. To see the energy with which the little fellows scratch and peck away at the sod is pleasure enough to repay the trouble, to say nothing of the benefit it is to them. During the eight years we have followed this plan we have not lost eight chicks in consequence of "indoor practice."

So Long as Only Farmers were Hurt Who Cared?

A staff correspondent of the American Agriculturist, in speaking of the lung-plague, has this rap over the knuckles for "the Government," for its neglect of farmers' interests:

The existence of this malsady in the "swill-milk stables" of the vicinity of New York has long been known, and the danger to the agricultural community often pointed out by the agricultural press. So long as it was only the farmers who were hurt, or likely to be, nobody cared, but the moment the mercantile interests, shippers and ship owners, and the "cattle trade," the railroads and all concerned in traffic in cattle, were affected, the whole country was aroused, the States of New York and New Jersey, and the General Government, all took prompt action, and are doing no half-way work, so far as I can see.

Line upon Line.

Mr. W. F. Clarke prints in his Western Advertiser columns a plea for the improved system of farmers' gardens frequently suggested in the DEMOCRAT:

"A roomy area of land, unencumbered with trees affording free scope for the plough. Discard beds and sow every thing in long rows far enough apart to admit of tillage with the horse-hoe. By adopting this method the hard labor is reduced to the minimum, the whole matter greatly simplified. It will cost but a little extra trouble to make sufficient choice manure on hand to make the land capable of growing everything sown in it to such a pitch of perfection as to be a constant source of pride and pleasure."

We copy this because of the seeming necessity of "precept upon precept, line upon line"; and to give those who "potter" again this year in the old-fashioned, laborious, non-effective way, an opportunity to compare the obvious advantages of the proposed improvement over the objectionable garden plan of the forefathers, which kills weeds only at the cost of persistent hard work with rake and hoe.

Soap the Fruit Trees.

Correspondence of Country Gentlemen. A good wash, and at the same time a good fertilizer for fruit trees, is made by mixing soft soap and water in equal proportions for old, and two-thirds water for young trees, and rubbing it in thoroughly and liberally with an old broom. This kills insects, especially the bark louse; gives the bark a smooth, healthy look; and furnishes potash in a very available form for the growth of wood and fruit. The common practice of whitewashing fruit trees is objectionable as the lime stops the pores of the bark, and impedes the breathing and exudations of the tree operating very similarly to the skin of an animal. Whenever the pores of the skin are stopped, we expect disease. Soap and water keep the pores of the skin open and clean, and operate on trees very similarly. A tree well soaped looks as much better for the operation as a dirty boy does when well washed. It may be added that soft soap is an antidote to the borer. It will not kill him when fairly entrenched in the tree, but it does hinder the disposition of eggs, and destroys them when deposited.

This application should be made to all orchards annually, and this is the best month in which to do it.

Poultry for the Boys.

We find the paragraphs below in the Philadelphia Times and Boston Traveller, and dovetail them together that the DEMOCRAT's readers may have the benefit of their sound doctrine:

As a general rule we do not think farmers pay sufficient attention to the production of poultry for sale. Carefully kept accounts will demonstrate that one pound of poultry can be produced at about half the cost of the same weight of beef or pork, and always meets with a ready market. Another advantage is that it can be attended to quite as well, if not better, by women and children than by men, thus economizing the labor of the whole family, and directing it into the production of profit for the general purse.

Try the experiment of allowing the children, if large enough, to take care of the poultry for a share of the products, either in eggs or in dressed poultry. Charge them with all the food consumed and credit them with all the eggs or flesh consumed by the family, and note your percentage in speculation, and the benefit it has been to them.

A school-boy built a henery, thus improving his mechanical skill, and then bought a number of barn-door fowls, and took care of them while attending school and doing his proportion of "chores." In a year and a-half he cleared, after paying for everything his fowls consumed, \$140, and spent no more time with his fowls than his school-mates did in their amusements, and without doubt caring for his pets gave him as much satisfaction as anything else he could have done. He made his money simply by having a regular daily system of cleanliness, and feeding those few fowls, and properly caring for their eggs and increase.

Another Current Worm Cure.

Mr. H. Lyman, of Broome county, N. Y., is responsible for this:

If gypsum (plaster) is put on currant worms at noon, it does them neither good nor harm. But the case is different if it is sprinkled on before they wake in the morning. The dew falls with the gypsum upon them and hardens in two minutes, so that when they wake they find themselves in a sarcophagus from which they cannot escape.

Horse Delusion.

Col. Curtis in Rural New Yorker.

Gradually it begins to get into the minds of the average farmer that raising trotting horses doesn't pay—at least for him. It may pay somebody, but that somebody is not himself. "Tis true the papers say that "Joker" has been sold for a thousand or more; but young "Dexter," now five years old, that has a very "promising gait," and has never earned a cent, for he was too valuable to work, has now been sold. "The price for such a colt is low—not a bagatelle of his true worth. Such a stepple as he is worth \$500. Why people ought to snap at him at that figure." "He will go one of these days, when a man comes along who can appreciate him." "Why, I should not be surprised if he brought several thousands yet. See what Bonner pays, and this colt is a grandson of "Hambledonian."

And so the delusion is kept up until young "Dexter" "eats himself up" several times, and the skeleton buggy is worn out, and then in despair and disgust the owner sells him for \$125—all he is worth—and the trotter goes into the horse market and wears out before some light wagon or perhaps a street car.

"Hard Pan" in Farming.

Much has been said about getting down to "hard pan" in financial matters. The farming of the country needs to get on this basis as well, and this will not be until crops are grown with the distinct understanding that their growth has taken from the soil something that must be replaced, before we can know whether the crop is a profit or a loss. Selling crops year after year without manuring, is quite as bad in farming as doing business on a fluctuating and depreciated currency is in money matters.

Odds and Ends for the Garden.

From the American Agriculturist. Fill vacant spots with sweet herbs from seed-bed. - Use the hoe. - Cut off flower stalks as often as they appear upon the rhubarb. - Use the rake. - Take care of the hot-bed and other sashes. - Use both hoe and rake. - Nasturtium, Okra and Martynia for pickles, may still be sown. - Use all the weeding implements often.

Clover Better than Bank Stock.

Land laid down with clover is better than money in bank, drawing more interest than any bank can pay and compounding the interest oftener.

A Good Deal of a Man.

Prof. W. O. Atwater. The intelligent, progressive American farmer, and his name is legion, is a good deal of a man.

AGRICULTURE should be fostered by government because it creates so much business. It is not the cities, but the rural population that makes the great market for our manufactured products. Wipe out the ability of the farmers to buy manufactured goods coming from our mills, and the mills would stand still.

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