

The Centre Democrat.

BELLEFONTE, PA.

AGRICULTURAL.

NEWS, FACTS AND SUGGESTIONS.

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, Penn'a., that other farmers may have the benefit of it. Let communications be timely, and be sure that they are brief and well pointed.

WE HAVE received, for inspection and trial, one of Diddine's Adjustable Seives, made by the Milton Seive Manufacturing Co., at Milton, Pa. We have not had opportunity as yet to test the qualities of the seive, but an inspection of it leads us to believe that it will prove a great acquisition to the farmer as an aid in getting rid of fowl seeds from among his clover and timothy seed. It is what its name implies, adjustable, and the size sent us would seive anything from the finest timothy seed to wheat. When we have tried it we will tell our readers how well it meets our expectations.

A VISIT to General Beaver's place, east of the borough, a few evenings since, showed us the grasshoppers in full force. They make their work of destruction complete as they go, and they go with wonderful rapidity. The General's crop of oats was entirely destroyed by them, and his garden, potatoes and corn are being rapidly eaten up. If the work of these devouring vermin has been as destructive in all that portion of the county over which they have traveled, as it has on General Beaver's farm, they have already cost the county many thousands of dollars, and the prospects for next season are by no means encouraging.

WE HAVE just been spending an hour in singing the caterpillars off our trees. The brown spots on the ends of the limbs which indicate their presence are seen quite plainly now, and about the middle of the day, they were all at home, we armed with a large pole, with a bit of three feet long in the middle of rags, the coal matches, and through the rag saturation makes this a very effective weapon. This was the first time we have done this in these days, but it is well worth while to destroy them, and afterward added to the thing of the sort that we can get at.

SOME years ago Philadelphians planted large numbers of the beautiful silver maple, which were promptly attacked and nearly ruined by the measuring worm. As an antidote to this the English sparrow was introduced, and in a few years completed the work of extermination assigned it, and saved the trees. Just now Philadelphia is excited over a successor to the measuring worm—the pestiferous caterpillar—which has attacked the silver maples as though their destruction was its special mission, and which the sparrows refuse to touch. In writing of this enemy, Prof. Joseph Leidy directs the attention of the public to the fact that at the present time they are easily exterminated by destroying the cocoons which are being distributed in great numbers on the trunks of the trees, and tree boxes, and along the fences. We call attention to this matter for the purpose of cautioning our farmers against a neglect of this caterpillar pest. It is not a new thing, but simply a great increase in numbers of one of the many tribes which abound in all the country, and the country is just as liable to suffer from this increase as is the city, whenever favorable conditions present themselves. Cocoons of all sorts should be promptly destroyed, whenever and wherever found. Every one of them contains the germ of future trouble to some tree or plant, and a little vigilance now may save serious work hereafter. While upon this subject, Prof. Leidy presents a strong plea for the preservation of the crow, robin, blackbird and many other birds that are regarded as common enemies to agriculture, and therefore killed at every chance. We are glad to give

circulation and endorsement to the Professor's just views upon this subject. These birds are the natural enemies of all the pestiferous insect tribes, and the corn, cherries and berries which they consume for the sake of a little variety in their daily bill of fare are infinitesimal when compared to the good they do. The preservation and protection of the birds is one of the farmers' strong points in his warfare against destructive insects.

WE NOTICE a paragraph on its travels through the papers of the State, to the effect that the "State Board of Agriculture has prohibited county agricultural societies that receive the annual one hundred dollars State appropriation from offering premiums for horse racing." That any newspaper of standing should be misled into repeating such a statement is beyond our comprehension. Not only is the entire story untrue, but it is without any foundation in truth, and never can, by any possibility, be true. The State makes no appropriation to county societies. There is a State law under which county agricultural societies, having complied with certain conditions, are entitled to receive one hundred dollars per annum through the county commissioners, from the county treasury. This, however, is exclusively under the control of the commissioners, and neither the State Board nor the State itself have anything to say or do with the matter. We have a note from T. J. Edge, Esq., Secretary of the State Board, saying that the Board has never even considered the subject, and that such a proposition would meet with no favor, and would not receive a single vote. So far as our observation has extended, the State Board is doing good and much needed work, and attending strictly to its legitimate business. It has neither time nor inclination to meddle in matters that do not pertain to it, and the promulgation of such a report as this, calculated as it is to injure the Board, must have its origin in pure maliciousness.

DURING a recent visit to Williamsport we improved an opportunity which offered to drive out to the place of Mr. Thomas Evenden, the oldest and perhaps the most successful market gardener in the city. Mr. Evenden started a number of years ago as a renter of eight acres of ground, and with no capital excepting his pluck, energy and knowledge of his business. Before many years he had made his eight acres purchase of himself, and afterward added to it an acre of good land adjoining. As a result of the labor and manure skillfully applied to these twenty-three acres, Mr. Evenden is to-day in possession of a comfortable fortune; ready to retire from active business, and turn it over to the two sons whom he has reared. It is not only a great pleasure, but a most useful lesson to the thoughtful farmer to walk over and examine such grounds as these, in company with the hard-working proprietor, who, justly proud of his achievements, is glad to tell of his successes, and point the moral which they teach. After the drouth of the early summer, which left the crops of the ordinary farmer, and the gardens of the country, village and city stunted, parched and curled, it was a pleasure to look upon the rich, luxurious growth which here abounded on every side. Here were hedges, from the bright English juniper, down to the beautiful little Tom Thumb arbor vitae, as solid, fresh and trim as though rains had been frequent and abundant; strawberry vines just closing their fruiting for the season, from which had been picked berries a score of which would fill a quart, and vegetables, plants, flowers, fruits and trees of all sorts, with a rank, green growth, exciting at once the envy and the admiration of the less successful farmer. We asked, "How is this, Evenden, that you can get such growth as this, notwithstanding the dry season we have had, while we farmers, many of us, will be compelled to sell our stock because our crops will not make stuff enough to keep them over winter?" And here came the answer, quaint and bluff, but full of practical agricultural wisdom: "Why! lookie, man! ye farmers don't know how to treat your land: ye

tak' and tak' an' never give. Ye put on dung like ye were giving medicine to a sick child, instead of like ye were feeding a man to mak' 'im strong for labor. Why! lookie, man! besides all the manure I make here with my stock and my weeds, and the offal from my vegetables, I buy in the city, year in an' year out, for my little twenty-three acres, more dung than is made on the five biggest and best farms in Lycoming and Centre counties; an' lookie! ye see what it does for me. It tak's a power o' money for the manure, an' labor to put it on, but lookie! it comes back, twice over, from the truck." It is the manure and labor that tell—not the land.

THE "heated term" of June and July gave opportunity for a thorough test of the keeping qualities of the Ferguson Milk Bureau, of which we made note in the early part of the season, and we are glad to say that it has amply fulfilled all the promises made for it. Milk and butter keep fully as well in it as in the best of spring houses, and the convenience of having it at the kitchen door, saving the numberless and tiresome steps up and down the hill to the milk house, is fully appreciated by the ladies of the household. We value it highly, and commend it to all our readers. Full description and particulars concerning it may be had by addressing A. B. Cogswell, Secretary, Burlington, Vt.

Since writing the above we find in the Burlington Free Press a very interesting account of this invention and the enterprise of its manufacturer, from which we take the following description of a new form of Mr. Ferguson's invention: "This is a combination of milk closet and refrigerator, made in two or three sizes for the use of families keeping from one to three cows. It is of smaller dimensions than the bureau; is made with double walls, with air space between; has an ice-chamber at the top; either two or three shelves for milk pans below; a receptacle below for butter jars; and places for other things needing to be kept cool. This is just the thing which many a housekeeper has been wanting in order to keep her milk sweet and butter and cream in the best order, and in many families no other refrigerator will be needed."

Hints to Wheat Growers.

In a broken, hilly country, it is throwing away time, labor and money, to sow wheat on a hill-side with a northern exposure. Even if the plants should chance to pass the winter safely—which is seldom the case—they will never mature. They will, in nine cases out of ten, be destroyed by the rust before they can possibly ripen. As a case in point, I have a hollow field which runs from east to west. Following the hollow and going west, one has a south hill-side on his right-hand and a north one on his left. From the middle of this hollow to the right, I have never seen the wheat fail to mature, although the yield was sometimes very indifferent; from the middle to the left, I never knew but one crop to ripen. On hill-sides the exposure must be either east or south, otherwise it would be better to sow rye in the fall or oats in the spring. In sections where the land is only gently rolling, these remarks admit of considerable modification.

The time of sowing does not make any great difference in the time of ripening, as this latter is almost wholly controlled by the situation. On southern exposure, wheat sown the 1st of October, will ripen sooner than the same wheat sown on a different situation the 1st of September. Some varieties, as, for instance, the Boughton, do most of their tillering in the fall, and consequently, in order to succeed, they should be sown very early; others, as the Fultz, tiller mostly in the spring, and may be sown later. It may be set down as a rule, with few exceptions, that the large-grained wheats ripen late, the small-grained, early.

The length of the ear does not have as much to do with the number of grains contained in it as many suppose, since the intervals between the spikelets in the large-grained kinds, is much greater than in the small-grained. An ear of Boughton would probably have as many grains as an ear of Clawson of one-third greater length. There would be, however, this difference in favor of the large-grained—admitting the number of grains in both kinds to be the same, on an average—that it would take about 700,000 small grains to make a bushel, and 550,000 to 600,000 large grains. Maj. Hallet, of England, claims that 450,000 grains of his pedigree wheat will make a bush-

el. The form of the ear and the number of grains in the spikelet, have much to do with the yield. A square-shaped ear with four to five grains to the spikelet, will yield more than a much longer pointed ear with three grains to the spikelet. A spikelet contains from five to six florets, of which one always—sometimes more—is barren. No spikelets, then, can contain at most more than five grains—often only three. It will be readily understood from this how it is that in California they obtain so much greater yields than we do, as the wheat there averages four and five grains to the spikelet, ours only two or three. Our wheat generally stands as thick on the ground as theirs.

The great enemy of the wheat plant in this country is the rust, or mildew, as it is called in England. There is no year in which it is not more or less prevalent. While it is true the plant, to be perfect, should have all the blades turned to golden yellow from the ground up, still the loss of the blades does not appear to affect the size and plumpness of the kernels. It is only when the roots of the fungus penetrate the stem and intercept the flow of the sap to the ear that the grain loses its color and shrivels. The only certain way by which the effects of rust may be avoided is to sow a variety which will ripen early. In this climate, a sort which would be ready to cut by the 20th of June would generally be safe; one that ripened as late as the 1st of July would always be more or less injured. It is probable that ashes, or a mixture of ashes and salt, if applied in quantities sufficiently large, would have a tendency to prevent the ravages of rust. I have observed spots in fields, where brush heaps or a pile of stumps had been burnt, in which the straw was perfectly clean and bright, while all around it was perfectly black. When a field is struck with what is commonly called "the black rust," the only thing to be done is to cut it immediately. A single night will ruin it utterly.

At an early date we will continue this subject by the consideration of the varieties of wheat, and the results of some experiments with the newer ones by the author of the above.

Among Our Contemporaries.

The Scientific American for August 2 contains very fine illustrations and careful descriptions of a new potato digging machine, recently invented in Germany, and a new portable mill and thrasher and straw elevator, both of which are late English inventions. Besides this it devotes nearly two of its large pages to a report of the French Commission appointed to investigate the Phylloxera or grape louse. Judging from the name the Scientific American would not be thought peculiarly adapted to the reading of the farmer, but the increased space and attention it gives to agricultural matters at once manifests its interest in this leading industry, and makes it well worth a place on the table of every intelligent farmer.

The enterprise of the Rural New Yorker seems unbounded. Its next specialty will be a "Fair Edition," which will be issued the latter part of this month, and of which fifty thousand extra copies will be printed. The publishers promise in advance that this "shall be the most costly number of the Rural ever published," and invite all to send for copies for free distribution.

A Field Roller.

There are some soils upon which a roller is not needed, but on most fields it would do the farmer good service. If used at the right time it will break up the clods and enable the harrow to make the surface soil very fine. Sometimes the soil is so soft that it is very desirable to roll it before the sowing is done. Some of the grass seed can be covered as well with a roller as with anything, and the land will be left in much better order if it is used than it will be if a brush harrow is employed. On stony fields a roller saves a great deal of time and labor by crowding the small stones into the earth, where they will be out of the way of the scythe. Grass land is often benefitted in the spring by the use of the roller, which packs the dirt around the roots of the plants. Winter grain is frequently saved from the destructive influence of the frost by rolling in the spring. The roots which had been partially thrown out are pressed back into the land. There are so many purposes to which it can be profitably applied that a farmer who never had one would be surprised to find how often it proves useful.

Give your hens as much sour thick milk as they will eat. It will be improved by stirring a few handfuls of wheat bran into it before it is poured into the feeding troughs. It is good food for poultry, old or young.

As fish are adapted to the sea, beasts to fields, and fowls to the air, so should there be a corresponding adaptation of grass, grain and hood crops to the varied conditions of the soil to insure success.

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