

appeared simultaneously with Mr. L's book. The author, the late lamented M. Quinby, showed in this work a familiarity with the economy of the bee truly astonishing to one writing at that time. It was eminently practical, and did much valuable work for the advancement of rational bee-culture. He also invented the best form of bellows smoker then in use and this has been further improved by the addition of the direct draft principle invented by Mr. T. F. Bingham, which leaves nothing more to be desired in this line.

Mr. Quinby wrote largely for the Agricultural press of the country. He freely gave all his ideas and inventions to the public for the promotion of the cause he loved, and labored faithfully to raise bee-keeping to the dignity of a distinct profession. The quiet, noble, self-sacrificing spirit manifested by this truly great man, will be talked of and cherished and felt so long as the keeping of bees shall engage the attention of men. The writings of Mrs. Tupper, the Harbisons, Metcalf, N. H. and H. A. King, Prof. Cook, and others, have done a vast work in bringing about the present advanced stage of bee-keeping in this country. While A. I. Root, T. G. Newman and your humble servant, realizing that "constant dropping wears out a stone," are constantly pelting away at the superstitions and prejudices of the people, and hope ere long, to end the battle in complete triumph. The most convincing arguments, however, are those which appeal to the *palate*, and the *pocket*, and these are being effectually used by Harbison, Hetherington, Doolittle, Betsinger, Clark, C. J. Quinby, and many others, in the shape of tons of honey as beautiful and pure as the nectar which Jupiter sips. And this is being distributed all over the world by Thuber, Quinby, E. & O. Ward, Thorn & Co., of this city, Muth, of Cin., Vincent of N. O., and by the large dealers in other cities. We learn from statistics that there are now in the United States about 1,000 different bee hives covered by patent, and a still larger number unpatented. Nearly all the inventions of European origin have been greatly improved by our Yankee ingenuity, and men everywhere are waking up to the importance of this industry as never before. The aggregate yield of honey is largely on the increase; besides, the quality and quantity, and the methods used in America are far superior to any other country, and these facts, taken together, are creating a fear in the minds of some of our most thoughtful Apianians that the prices received for honey may fall below the cost of production; so we will present a few facts which we think may tend to allay these apprehensions. Great Britain consumes annually about 9,000,000 lbs. of sugar for brewing purposes. Other foreign countries, as well as our own country, a proportionally large amount. It is a fact that Extracted honey contains a much larger percentage of the elements needed as a substitute for malt than sugar does, and is cheaper at 90 cents a gallon, than sugar is at the lowest prices it has yet reached. A desirable change by substitution is now going on and may be greatly hastened by well directed efforts on the part of honey dealers. 2d. Not more than 2-5ths of our people have yet learned to eat honey, not because it is not generally acceptable, but it has never been brought to their notice as a staple article which may be had at the same price as the best quality of syrup, and that it is far more healthful.

3d. A large percentage of the syrups in general use in our families are badly adulterated, and positively unfit for the human stomach, and particularly the stomachs of children. This fact is fast being recognized by the most intelligent of our population, and only needs a little judicious pressing through the papers to displace it, and in its room put extracted honey.

4th. Laws against the adulteration of honey, affixing such penalties of fine and imprisonment as shall afford complete protection to the producer, the honey dealer and the consumer. Steps should be at once taken to effect this

desirable result, before some other unprincipled honey dealer shall cause Great Britain to give us the second slap in the face through their leading papers, by branding us as a set of swindlers, and warning the English people against the use of American honey.

A petition setting forth this matter in its true light should be presented to Congress at its next session. All the members of this National Convention, including all dealers in honey, should be asked to sign this petition, and a refusal from any cause whatever should be regarded as favorable to honey adulteration, and producers should be warned against selling such persons their honey. Such a petition, praying for so laudable an object, and backed by so many honorable names, could hardly fail in obtaining the desired law, when extracted honey would at once advance to its true position in all our markets. Bee-keepers everywhere should be united in bringing about these needed reforms, and imitating the politicians, should "keep it before the people" till the end is attained. The journals devoted to bee-keeping should be bold and outspoken on this subject, regardless of all present emoluments for a contrary course, and for one, I here and now pledge the *Bee-Keeper's Magazine* to this policy without the least equivocation or mental reservation, and I expect to see friend Newman, of the *A. B. J.*, join hands, and then, by a rising vote, test the sense of this association, and thus make a significant stride in the true progress of bee-keeping in this country.

OUR LOCAL ORGANIZATIONS.

Proceedings of the Lancaster County Agricultural and Horticultural Society.

The Lancaster County Agricultural Society held its regular monthly meeting in their rooms in the City Hall, on Monday afternoon, Nov. 4th, 1878.

The following members were present: Calvin Cooper, President; Joseph F. Witmer, Paradise; Henry M. Engle, Marietta; Jacob B. Garber, Columbia; Henry Kurtz, Mount Joy; M. D. Kendig, Manor; J. M. Johnston, city; Casper Hiller, Conestoga; Levi W. Groff, West Earl; Levi S. Reist, Manheim; Daniel Smeych, city; Frank R. Diefenderfer, city; Jacob G. Zerr, President of the Berks County Agricultural Society; Dr. S. S. Rathvon, city; Johnson Miller, Warwick; C. L. Hulsecker, Manheim; Ephraim S. Hoover, Manheim; Peter S. Reist, Litz; Franklin Sutton, Manheim; John S. Buckwalter, East Lampeter; Simon A. Hershey, Salunga; Mr. Landis, Eden.

The meeting was called to order by the President, Calvin Cooper.

The reading of the minutes of last meeting was, on motion, dispensed with.

Report of Committees.

Casper Hiller said he was one of a committee to report on artificial fertilizers, and was desirous of knowing who the other members are, so that they can get together and prepare for business.

The members, as reported by the Secretary, are Johnson Miller, J. C. Liville, Casper Hiller and W. H. Brosius.

Crop Reports.

Henry Kurtz reported wheat as looking well. Some seeding was kept back until last week. Some wheat that looked yellow, now seems to be doing very well. Corn is nearly all away. It turns out tolerably well. There will be a middling crop. Tobacco is ready to strip.

Henry M. Engle does not think wheat shows very well. Some fields are pretty good, but many are not prepared to stand a hard winter. Corn is better than expected; is hard and nearly all husked. Late potatoes are very poor. Young grass is very fine. The rain fall for October was 3.46 inches.

M. D. Kendig, of Manor, reported wheat as thin. That planted on tobacco ground looks best. The ground seemed to be more moist. It has come out very much since the late rain. Corn is about three-fourths of a crop. Young grass is coming out well. Rain fall for October 3 3-10 inches.

J. G. Zerr, of Berks county, said he came here on a visit merely, but he would say what he saw on the way. He was surprised at what he saw. The wheat along the road he traveled looks very well, as fine in fact as in former years. In Berks county the wheat is very poor. Some sown six weeks ago seems to be just coming out. There is some still to be sown. If the weather continues favorable it may still come up.

Calvin Cooper, of Bird-in-Hand, said on rough ground there is but little wheat. It is set very thin. Where the ground was in tobacco, corn or potatoes

it looks better. It came up better and looks better.

Johnson Miller, of Warwick, said there was not much to report at this season of the year. Of the wheat sown this fall part is not yet above ground. There has not been such a season for farmers to get out their wheat for a long time; no rain of any account for nearly four months. It was a very hard matter to plow, and many acres were not put out at all that were intended to be sown. Early plowed ground looks well. The corn crop is a small one, but much better than was expected. It will average 40 bushels to the acre. Pasture is all gone. Farmers now feeding in the stable. The tobacco is still hanging. It is curing finely. Farmers are hauling manure and plowing for another crop of corn. It is a matter of seasons, which is the better, fall or spring. The price of grain is discouraging to farmers, and they must manage their affairs economically in consequence. At present prices we must raise larger crops with less labor, and to do this we must improve our land and attend to our business.

Levi W. Groff never noticed so much difference as this year between grounds planted last year with wheat and that planted in tobacco. Wheat sown on the latter is far ahead of that sown on the former. Corn is the poorest for years; not over half a crop.

Casper Hiller said corn is three-quarters of a crop; better than was expected. He reported planting a late crop of potatoes which gave a very small yield, but the tubers were uncommonly fine. It was remarkable for that fact only.

Reading of Essays.

The President, Calvin Cooper, gave a talk on what he regarded as bad farming. We must keep up our farms. Barnyard manure is the best reliance we have. We ought to husband all the excrement from our stock. For this reason we should keep cattle in small enclosures. He drew a diagram of a farm of fifty acres on the blackboard. He thought a farm of that size the most desirable, and a square shape the best. He in that way economized in the matter of fences. The land was divided into five fields, beside the orchard, garden, barnyard and yard for the house. The fencing would cost, with interest and repairs, in ten years \$990.70. Five years later the cost would be \$297 more. In fifteen years, \$1,469.80, including first cost. The entire cost in twenty years will be \$2,094.58. In thirty years, \$3,753.36. In forty years the total cost, including repairs, interest and all, will be \$7,110, on which the interest would be \$426.60. This was for interior fences only.

The sum is enough to support a reasonable man during his declining years. We must avoid this expense. The time seems to have arrived when something must be done to get rid of this evil. He was at a loss to know what plan to adopt except penning up the stock. He advocated the abandonment of interior fences.

H. M. Engle agreed with Mr. Cooper. Fences are an expensive luxury. The fact is beyond dispute and must be admitted. He hoped that as many are adopting the soiling system we will in time be relieved of the cost of maintaining this luxury. Then there is the advantage of soiling cattle. One acre of grass by the latter system will go as far as three by the ordinary manner of pasturing. Much additional manure would be made. Our farms would improve more rapidly. The space now wasted by fences would also be saved. It is high time that we do as they do in the west. As the case now stands we can not compete by the ordinary method of farming with them. We will see this more clearly every day and will have to face it.

Casper Hiller had no fault to find with the theory just advanced. It can be carried out, no doubt, but it must be done by better farmers than we are. When grass was fed all would go well, but when the clover crop was over what would we feed them? It requires a different kind of farming from that now pursued.

H. M. Engle said that it was like all other things; it looks a little difficult, but this is an idea only. Let us sow rye to begin soiling with. By this plan you will have yellow butter lough before your neighbors. Then sow peas and oats; then you can begin with clover. When that is away, early sown corn will be ready, and if this latter is sown at proper intervals it will be in season until fall. Hungarian grass and millet may also be sown to keep up a succession of fodder. Your lands will grow richer and your crops heavier all this while. We must come to the soiling system after a while.

Levi W. Groff had much satisfaction in finding so much interest shown in this question, but he believed the old farmers would have to drop off before the plan is generally introduced.

C. L. Hulsecker thought our methods of farming are good, but still we can improve on them. He believes it possible to dispense with interior fences, although he hardly expected to see it done during the present generation.

The names of several men were given who have removed their interior fences and are soiling their cattle.

Mr. Zerr had no doubt the system of soiling will come into practice before many years. He believes in it; it gives us the use of much ground now taken

up by fences. The latter are nothing but a slinking fund that makes no return. Rye, grass, oats and corn can be sown in proper succession, so as to give you all the feed for your cattle you need. Roots, cabbage and the like can also be made to contribute to soiling cattle. The latter being kept quiet will give more milk and butter. You can also increase your manure pile by gathering leaves. He knew of a number of persons who are taking out their interior fences; he had done so partially himself. The increase in manure alone will pay for the trouble in soiling cattle.

Henry Kurtz did not agree with the high estimate of the cost of fences. He has put up fencing that has stood ten years and has not yet cost a penny in the way of repairs. The expense of soiling is more than is commonly believed. Cows don't like rye; they prefer grass. He has tried growing corn for feed, but it is not always successful; it was not this year. Some fences can be dispensed with but not all. When cattle happen to get loose and get into your grain fields, the damage is not a little. We must economize on our farms. Make more manure. Keep less cattle in summer and more in winter. We raise more corn and wheat to the acre than they do in the west, but their lands are so much cheaper that in the end it counts up. But still we can on the whole make more money than they.

Mr. Cooper remarked that the latter speaker criticised the cost of his fences, but his estimate was really forty cents per panel more than the speaker's.

Mr. Kurtz said there was fencing on his farm that was there thirty-four years ago, and is still good.

Dr. S. S. Rathvon read the following essay. (See page 164).

H. M. Engle commended the hints and suggestions of the essay, and expressed the hope that members would act on them as time and opportunity offered.

Henry Kurtz thought we were of some importance as a society. People are often asking about us and always read our proceedings in the papers. If we put our shoulders to the wheel we could do much more than we do. He favored the views of the essayist.

Mr. Zerr thought it would be encouraging to persons to become members if there was a collection of cereals and other products on exhibition.

On motion, the thanks of the society were extended to Dr. Rathvon for his essay.

H. M. Engle hoped the hints thrown out by Dr. R.'s paper would not be forgotten, but acted on. It will cost but little, and all can contribute. Farmers are not geologists, as a rule, but some can also make contributions of that kind.

Casper Hiller suggested that Dr. Rathvon begin the collection by placing on exhibition some of our most destructive insects, such as the curculio, Hessian fly and the like. Many persons do not know these destroyers when they see them.

Levi W. Groff was pleased with the idea thrown out. Such a collection exists at the office of the *Village Record*, and is now a curiosity.

New Business.

A bill for the erection of a table and shelves was presented and ordered paid.

Levi W. Groff read a short paper on county fairs. He was a member of an organization of this kind twenty years ago. It broke up in consequence of introducing horse racing. He opposed this kind of attractions. He took stock to all our county fairs, horses only excepted. He suggested the appointment of a committee to visit fairs in the neighboring counties and report to this society as to the best methods of holding such fairs.

Action on Mr. Groff's suggestion was deferred until next meeting.

Dr. Rathvon, in reply to a question, said grain of all kinds can be protected from insect ravages by subjecting them to a high degree of heat prior to putting them in air-tight jars or bottles.

A resolution was some time ago passed offering premiums on papers relating to the cultivation of wheat and small fruits. It was proposed a committee of three be appointed to examine such essays and make the awards; and also that a premium be awarded for essays on any of the cereals.

The chairman appointed the following as the Examining Committee: W. McComsey, F. R. Diefenderfer and Peter S. Reist.

Report of the Fruit Committee.

By Daniel Smeych: A magnificent specimen of Beurre Clargeau pear, being about five inches long.

Levi S. Reist: Apples—Baldwin, York Imperial, Hubbardston Nonchuck, Roxbury Russet, Northern Spy, Winter Spice, Cambridge, Smith Cider, Griest's Winter, R. I. Greening, Golden Pippin, Krauser, Pound, Sheepnose, King of Tompkins County, Smokehouse, Wine or Redstreak. A very superior lot of apples.

A Moustrous Pippin, moustrous in name and size, by Peter Kohrer.

An apple, Egg Top by name, from a street stand; an apple of beauty and of good quality. The proper name of the above-named pippin apple is *Gloria Mundi*.

Business for Next Meeting.

The following questions were offered for general

discussion at the meeting: "Should the growing of tobacco be encouraged; if so, to what extent?" "Will it pay to keep thoroughbred males in raising stock on the farm." Referred to Jos. F. Witmer.

There being no further business before the society, it adjourned, on motion, until the first Monday in December.

TOBACCO GROWERS' ASSOCIATION.

The regular monthly meeting of the Lancaster County Tobacco Growers' Association was held Monday afternoon, October 21, 1878, in the room of the Agricultural Society.

The following members were present: Sylvester Kennedy, Salisbury; Henry Shiffner, Bird-in-Hand; M. D. Kendig, Manor; J. M. Johnston, city; A. P. McIlvain, Paradise; Israel L. Landis, city; Webster L. Hershey, East Hempfield; Frank R. Diefenderfer, city; Clare Carpenter, city; Prof. S. S. Rathvon, city.

The meeting was called to order by the President, M. D. Kendig.

On motion, the reading of the minutes of last meeting was dispensed with.

Shall we Disband?

Peter S. Reist made a motion that hereafter the meetings of this association be held quarterly.

I. L. Landis, in debating this motion, was doubtful whether the proposed plan would help matters much. The farmers seem indifferent. He would rather see the thing go down at once than drag along as it now does.

Sylvester Kennedy thought we might as well let the thing go down at once. The longer it runs on the worst it seems to get.

Mr. Reist did not think it was owing to lukewarmness that there was not a better attendance. He knows the reports are widely read, and that is the reason so few come here personally. There were plenty of growers here nine months ago when their last crop was placed on the market. He thought they would do so again in a short time.

I. L. Landis thought there were plenty of farmers who were ready to profit by what is done here, but are unwilling to pay anything towards sustaining the association. But as the thing is now dragging we have no encouragement whatever.

Mr. Reist's motion being put, was carried, and the meetings will hereafter be held quarterly.

How Can we Get the Best Prices for Our Tobacco?

Henry Shiffner thought there was not enough identity of interests between growers and buyers. The latter are often called thieves and robbers, whose only interest is to swindle the farmers. Where such a feeling exists a sale will seldom be effected. If farmers knew the value of the tobacco better, they would sell it sooner. They almost invariably put too high an estimate on their product, and when buyers refuse to give it they get angry.

Sylvester Kennedy's experience has taught him that buyers are not always inclined to do the fair thing. He gave instances where he believed he had been hardly dealt with. He thought there was a certain understanding among buyers last year not to pay over a certain price for tobacco. The remedy is in the hands of the growers. Let them pack and hold it. This plan is pursued largely in Chester county, and the farmers find their account in it. He recommended a concert of action among growers to secure a fair price for their crop.

Israel L. Landis has had a large acquaintance with tobacco buyers, and has never heard of a "ring" among them. If we have the right kind of tobacco, one that in color and quality is desirable, we are just as sure to get the full value for it as we are for our wheat or corn. Buyers will buy as cheaply as they can, just as all other kinds of dealers do.

Levi S. Reist remarked that wheat is now selling at 90, 95 and 100 cents per bushel, but to get the latter price the grain must be fine and plump and of the best quality. Tobacco is a commodity that is thrown on the market, just as wheat is, and growers must sell their goods at its proper value; if it is inferior, an inferior price must be expected. Some men get big prices every year, but it is in consequence of their superior knowledge in growing and handling the weed. Cheating is not always on the part of buyers, as he very well knew. The special mission of this association is to grow good tobacco, so that we can always get good prices for it, and if farmers attended these meetings more there would be less cause for complaint.

A. P. McIlvain did not believe in trying to combine either to buy or sell at other than the usual prices. There are many reasons why it is not practicable to advance money on tobacco to needy growers. It may decline in price, burn, or meet with other mishaps, entailing loss on the lender.

Place of Meeting.

J. M. Johnston, from the Committee to rent a room for the meetings of the association, reported that the society could meet in this room by paying half the expenses incurred by the Agricultural Society. He asked for instructions.

A. P. McIlvain made a motion to continue the committee until next meeting, which was adopted.

An Explanation.

Frank R. Diefenderfer said that at the last meeting of this association, when the question of collecting accurate statistics of the tobacco crop of this county was up, he remarked that the Secretary of the State Board of Agriculture had in his last report estimated the crop of this county at 40,000,000 pounds. He should have said, and meant to say, the Secretary estimated the crop of the entire State at that. The latter had written to him about it and he understood had also written to our President. After all, it was not a matter of very great importance. We grow fully four-fifths of the entire State product, and the difference is one of a few millions of pounds at most. But while Secretary Edge has been so anxious to be set right on this question, he has entirely ignored his own error of 20,000,000 pounds or more. It would be of interest to know how he happened to fall into such a glaring mistake, and it would not have been out of place, while calling attention to Mr. D.'s mistake, to have alluded to his own, and corrected that. He would, therefore, repeat what he said then, that such reports, official though they pretend to be, are a good deal worse than none at all, and it is to be hoped Secretary Edge's estimates of our other crops are more deserving of credit than those relating to tobacco.

W. L. Hershey offered to prepare a paper on the culture of tobacco at the next meeting.

There being no further business before the association, a motion was made and carried to adjourn. The next meeting will be held on the third Monday in January, 1879, when, it is to be hoped, farmers will show a little more interest in this crop than they have been doing of late.

BEE-KEEPERS' ASSOCIATION.

The Bee-Keepers' Association met at the Black Horse Hotel, on Monday afternoon, Nov. 11th, 1878.

There were present: Peter S. Reist, President, Litz; I. G. Martin, Earl; J. F. Hershey, Mt. Joy; John Huber, Pequea; D. H. Lintner, city; Elias Hershey, Paradise; U. K. Meisky, Manor; Jacob Christ, Millersville; John Musselman, Mill Creek; S. K. Royer, city.

The President read from the proceedings of the North American Bee-Keeper's Association in favor of local societies, and some extracts from the addresses of members relative to the origin and extent of bee culture.

The Bee Keepers' Profits.

A number of members gave their experience in honey production and the financial results of their operations. J. F. Hershey, who started last spring with 62 swarms, offered the following exhibit:

CR.	
By sale of 725 lbs. box honey at 20c.....	\$145 00
" " 80 lbs. extracted honey at 15c.....	12 00
" " 1 swarm.....	12 00
" " 146 Italian Queens.....	233 00
" " 17 nucleus swarms, queen in, on hand.....	51 00
	\$53 00
DR.	
To stuff for honey box.....	\$10 00
To postage for queens and letters.....	3 00
To sugar fed to bees.....	40 00
	\$53 00
Profit of the season's work.....	\$400 00

This is considered only an ordinary profit, owing to an unfavorable spring and a large amount of honey for winter use.

Elias Hershey's fifteen hives had increased to twenty-six and made 400 pounds of honey.

D. H. Lintner's eight hives had increased to sixteen, and made 125 pounds of honey.

U. H. Meisky's sixteen hives had increased to twenty-three, and made 300 pounds of honey.

Jacob Christ wintered five hives last winter; three of these gave one hundred pounds of honey, but two of them were good for nothing.

Peter S. Reist, in the spring, sold all but twenty-five hives, and had seventeen natural swarms, which increased to forty-two, from which he realized 600 pounds of box honey.

S. K. Boyer, from one Italian and one black swarm, got about thirty pounds of honey. The Italian swarm produced almost twice as much honey as did the black.

From nineteen colonies, in the spring, under charge of I. G. Martin, there were now 38, and a honey yield of 912 pounds was reported, 224 of extracted honey and 686 of comb honey.

In all the above cases the season was reported to have been unfavorable for honey, and the bees are now in good condition.

Wintering Bees.

I. G. Martin gave his method of wintering bees on the summer stand: Remove all the frames but six, and, if the colony is not very strong, take them all out but five, or even four, and then put in a tight-fitting division board, so that the bees are very much crowded, then they can keep warm much better. Make a large box that will give about three inches