



## FARMERS' INSTITUTE.

**T**HE FARMERS' INSTITUTE held Friday and Saturday of last week in Grange Arcadia was excellent in every respect. The rain on Friday deterred some from turning out, but the afternoon audience was composed almost exclusively of the best farmers and their wives in Penn's and Brush Valleys. It was an audience such as is seldom seen even on institute occasions. Saturday brought brisk winds—a cold wave, with frozen roads. The attendance was quite large, and of a character highly complimentary to institute work.

The speakers furnished by the Agricultural Department of the State were of a high order. Prof. Samuel B. Heiges is a man especially fitted for institute work. He has had vast experience in agriculture, not only in theory, but in practice as well. Every sentence he spoke contained a thought worth remembering by his hearers. In short, Prof. Heiges is an ideal institute worker.

Messrs. R. L. Beardslee and J. S. Burns had good talks on the subjects assigned them.

A. L. Martin, deputy secretary of agriculture and director of institutes, added much to the interest of the institute by his presence throughout all the sessions. Mr. Martin, by appointment of Governor Pattison in 1893, became a member of Farmers' National Congress, and by the appointment of the succeeding governors of the state has continuously held the position. He is a man of pleasant bearing and address, and when he took the floor he was given the closest attention.

Dr. William Frear, of State College, chemist of the Pennsylvania Department of Agriculture, is exceptionally well calculated for an institute speaker. Dr. Frear spoke on a subject that is receiving more and more attention by the farmers in this locality. The remarks by Dr. Frear will, if they are heeded, change the methods of many who are extravagantly using lime.

The local talent that enlisted in the work did much to make the institute of practical value. The papers read by this class were pointed and full of valuable information, and adduced evidence that there are farmers in Centre county who are abundantly able to go before their fellow farmers and point out better methods of farming than is generally followed; show where economy may be profitably practiced; and that the farmer who applies his brains properly and has muscle to back it up is not the most despised man nor engaged in the meanest pursuit of mankind.

J. J. Arney, the permanent chairman of the institute, performed his part of the work in an admirable manner. Much of the success of all public meetings depends upon the presiding officer, and in this case the chair was equal to all emergencies.

James A. Keller, the chairman of the program committee, and the gentleman who welcomed the people to Centre Hall and Grange Arcadia, performed his work in an excellent way. Mr. Keller's welcome was from the heart and expressed the true spirit of the people of Centre Hall.

R. L. Beardslee:—"What to do with a poor farm." The speaker based his remarks upon actual experience in Bradford county on this subject, and after highly complimenting this section of country on account of its splendidly organized Grange, proceeded: The first fault with most farmers is that they raise too much wheat, at the expense of the fertility of the soil. An antidote was deep fall plowing where the soil was suitable and haul the manure from the barn yard as soon as possible throughout the entire year. The key to the situation for improving the poor farm is to drop wheat as the money crop; keep cows and plant fodder corn.

D. D. Royer:—"Success on the farm." The speaker advocated the idea that the young men should remain on the farm. Farming is a science and must be conducted on a business principle. The mistress of the farm home has much to do with success on the farm. Good seed is necessary to success on the farm. Plow up to the fences; do the farm work systematically; take good care of implements; the farmer should know when to buy and when to sell; he should have something to sell every day. The farmer should have a good knowledge of stock; scrub stock should be discarded and the herd graded up. Good farm literature should find its way into every farm home. Failures can not always be attributed to mismanagement. Too many begin with too little capital. To conduct a farm successfully one must have brains, capital and muscle.

Prof. Heiges:—"Diversified farming." Commenting upon previous discussions, the speaker said the joint worm and the Hessian fly should not be confounded, and added that thorough cultivation and a rich soil, aided the wheat plant to recover from attacks of its enemies. Tillage is fertility, he said, and that point should constantly be born in mind.

The farmer should manufacture his products as nearly as possible into the finished product. Do not sell the corn fodder, and thereby rob your farm; turn it into milk and the milk into butter. When you sell a ton of milk you sell \$2.00 worth of fertility from your soil; when you sell a ton of butter but thirty-six cents are taken from the soil's fertility.

The speaker favored a more general growing of fruit. Every farmer should study the conditions that surround him. If away from railroads, perishable fruit should not be selected, but those that can be marketed at any time. Apples, for instance, can be kept and sold when the market is best. During all his travels as a pomologist of the National Department of Agriculture, Prof. Heiges thought he did

and develop into the stalk and grain. Who is more his own master than the farmer? He is in touch with the world, and has more hours to himself than any other class of men.

Rev. A. A. Black:—"The way to drive the young men from the farm is to give them the poorest of everything; keep the parlor closed against him; as soon as he is old enough, picture the dark side of farm life to him; make him believe that he has more taxes to pay than all other classes; that farm life is the most miserable of lives; don't tell him that it is the best place in the world to raise a boy or girl.

Secretary Martin:—"The Agricultural Department has issued a catalogue giving suitable literature for young people in the country. This literature will do much to elevate these young people, and aid in making them realize their high standing among their fellow men.

Henry Duck, Esq.:—"Leaks on the farm." The farmers of today hold the throttle to the engine which drives the world. He is free and independent. Waste is loss without equivalent gain, and maybe property, time, labor, words and the like. One of the greatest wastes on the farm is manure. It is wasted in many ways; between the barn yard and watering place; in large open barn yards, by leaching, especially where the barn is not properly spouted. Another way manure is wasted is by permitting large quantities to fall off the wagons when hauling it to the fields. Next comes the waste of land by fencing. On a hundred acre farm, one side on public road, and divided into six fields, with a lane leading through same, will require 777 rods of fencing, which at fifty cents per rod will cost \$388.50, besides the land occupied. This item makes a heavy drain on the resources of the farm. Use a portable fence. Next comes waste of time. Buildings should be conveniently located. Waste of feed is another item. Lack of judgment in forming a good balanced ration for a particular purpose. Young stock must be fed for growth; cows for milk. Never allow the elements to help wear out your farm implements. Too close grazing is another great waste; close grazing robs the soil of humus. With all these, and many more wastes not mentioned, the farmer is the greatest producer of wealth and feeds all mankind.

SATURDAY, A. M.  
Question:—"Should a farmer have a telephone in the house?" J. J. Arney: Of course, if he can afford it. Beardslee:—"In the eastern part of the state farmers erect private telephone lines and are thus connected with the outside world."  
Beardslee:—"Fodder corn, silo and silage. The corn crop, if properly stored, enables the dairyman to have as near as possible the same conditions during the winter months as prevail in June. The old way of farming corn must be abandoned, because it requires too much work to raise corn, husk it and put it on the market. Plow deep, manure as fast as you can, plant about twelve quarts of corn per acre, eight to ten inches apart in the row, in rows forty inches apart. To plant closer is detrimental. The corn plant needs light to enable it to store up sugar. If you do not have a silo, cut your corn when glazing, throw it on bunches and after a few days' wilting, put in large shocks and tie at top. When seasoned, haul it to the barn and stand erect; when October comes cut as needed, a few days in advance, so it will have time to ferment."  
Mrs. Frank Brown:—"The benefits of organization." She paid a high tribute to the organization of the Patrons of Husbandry, telling of the marvelous growth and great benefit to the farming classes.

W. M. Grove, Esq.:—"Line fences. The law on fences was quoted, and it was made plain that every one must care for his own stock. The only fence required by law was where improved properties join. He also related the methods to pursue where it was necessary to call upon the auditors as viewers. The only way to escape building fences at all, he said, was to throw a strip into common along the line fence.

Prof. Heiges:—"Treatment of unproductive apple orchards." There is no reason why (barring two conditions) an orchard should not bear every year. The conditions are these: If the frost does not kill the pistils and the wet weather does not drown the pollen. Since 1882, he said, but two crops of apples were lost in his orchards. The "off year" of the orchard is caused by the soil not having sufficient available fertility to produce a crop; second, over bearing. The potash necessary to growing fruit has largely been exhausted by the previous growth of farm crops. The apple tree sets fruit on spurs on wood two or more years old. These spurs may be clipped off with pruning shears to thin the fruit.

The general rule of farmers is to farm the orchard like other portions of the farm. Other crops should be omitted;

the soil cultivated. The orchard that is sodded, is in great danger if the soil is plowed. The little feeding roots are immediately under the sod, and to plow the soil will destroy these roots, which will prove detrimental to the trees. Use a spike tooth harrow, and scarify thoroughly. In regularly cultivated orchards, the feeding roots are deeper and will not be disturbed by shallow cultivation. If your apple trees are not growing three or four inches of wood every year, the soil is wanting in nitrogen. Barn yard manure will supply this, and should be applied outside the radius indicated by the branches of the tree, because that is where the water falls and this will carry the fertility into the soil and to the roots. Fertilizers should be applied in the fall. If your apple trees have an excess of growth of wood, it will be brittle and brash. This condition prevails where there is an excess of nitrogen. This may be checked by sowing a "robber" crop of oats which grows during the six weeks in which time the apple tree makes its entire development, outside the fruit. Potash, phosphoric acid and lime are also needed to develop a crop of apples. Usually there is a sufficient quantity of lime in the soil. The apple seed is 50 per cent. lime. The proportion of 400 lbs. muriate of potash and 800 lbs. South Carolina rock is an excellent fertilizer.

SATURDAY AFTERNOON.  
Dr. Frear:—"Lime and its uses." The soil is made up of many materials. The food applied must be balanced to the needs of the plant. The nitrogen supply in the soil in many cases is relatively too large for the perfect development of a plant. The soil contains a very unequal supply of four substances: Phosphoric acid, potash, nitrogen, lime. Lime trails way behind in necessity. The common expression is that if we have plenty of lime we need nothing else. The fact is, very few soils are lacking in lime. Does lime contain anything besides lime? No. It contains no phosphoric acid, no potash. Three hundred analyses of lime show but a slight per cent. of phosphoric acid. The largest per cent. was about as much phosphoric acid in a ton of lime as there is in a single pound of acid phosphate.

Lime has two uses—mechanical and chemical. Mechanical: It puts the soil into better condition; changes the texture. Lime makes the soil warmer, loosens it up, so that roots will be able to penetrate better. Too much lime in a sandy soil proves detrimental.

Chemical use: Lime sets loose potash; phosphoric acid is set free. Lime used on sod brings it into quicker available condition.  
How to test acid soils. Take about two ounces of soil, mix with rain water, dry it, press, open in V shape. Take litmus paper, moisten with rain water, insert it into the soil opening, and press soil about it. If the paper is colored red, the soil is acid, and will respond to lime. (The test for acid must be conducted so that the hands do not come in contact with the soil or litmus paper.) The quantity of lime necessary varies with localities, ordinarily twenty-five bushels will answer.  
Frank Bowersox, of Rock Springs, gave his experience with lime. With him it worked wonders, and no doubt his soil was just lacking in that particular element. Mr. Bowersox set a good example to institute speakers. He began on the subject and was on the subject when he quit talking. Instead of having an elaborate introduction, a story for a flourish, and no information in the middle.  
Question: Prof. Heiges: Is there perceptible waste in lime if it is allowed to remain in the stack and slake from rain and exposure? Certainly; a great loss; the chemical condition is changed.

J. A. Sankey:—"Dairy Cattle. The first question is to know what is wanted, and then go to work and breed it and stick to it. He described an ideal dairy cow, and spoke of the proper feeding of the calf that is to become the future dairy cow. The advantages of dairying with reference to improvement of the soil, owing to the fact that so little fertility was sold, when the farm crops were manufactured into butter, were also developed.

Prof. Heiges:—"Poultry for profit." Great as the poultry industry is, we have never produced enough eggs. Eggs are used largely in photographic operations, and in other mechanical ways. For food alone, the imports from Italy are large. Roosts should be placed on a level, and not on an incline. A bath tub should be provided, by pulverizing soil from a lime hill. When cholera attacks the fowls, pour a half cup of carbolic acid on this dust, and it will work wonders. The hens should also have a scratch pen, well bedded with leaves, chaff, straw or cut hay. Make the hen's condition in the winter as near as possible to those of the summer months.

Proper feeding: Corn is not an egg producer. Corn has but six and two-thirds per cent. digestible proteins. Wheat bran and chopped corn, equal weights, mixed in cold water in summer and hot water in winter, makes an excellent feed. Feed good wheat at noon; corn at night; corn furnishes heat. In very cold weather warm the corn. Keep several ears of burned corn before the hens, to correct the acidity of the stomach; feed vegetables, sugar beets, ensilage, cabbage, etc.

SATURDAY EVENING.  
Prof. C. R. Neff:—"Care of timber lands. One of the great problems of Europe is the conservation of timber. One of the conditions under which land was secured from Wm. Penn was that one-fifth should not be cleared of its timber. The ruthless, wasteful cutting of timber has stirred the government to take some measures to care for the forests in this country. The required board feet of timber in the U. S. is forty billions per year. The object is not to prevent the cutting of timber, but the present wasteful cutting. Prof. Neff had an excellent paper on forestry, but time did not permit him to finish his subject.

Misses Grace Boob, Anna Bartholomew and Florence Rhone recited in an excellent manner. They were lustily applauded, and brought forth many complimentary remarks on the part of the audience.

D. R. Wilson:—"Dairying." Seventy-eighths of the farmers of Centre county are dairymen. Poor butter will not sell at a profit; you must make a first-class article. The creameryman must be correct in his weights; keep everything scrupulously clean; deal fairly with his customers. To make good butter, good milk must be used. A single cup of poor milk will injure the entire output of a day; thus a careless patron injures not only himself but many others. Both quality and quantity of milk are necessary for a large creamery check. Patrons should properly care for their milk before bringing it to the creamery.

The creamery has done much for Centre county farmers. It raised the all around standard of butter; increased the prosperity of the farmer; it has lightened the load of care and labor under which the farmer's wives were staggering. It is safe to say that the creamery is here to stay. What it does for you depends upon what you do for it.  
D. K. Keller:—"Leaflets." The time has come when nature study demands the attention of every farmer, if he wishes to make a success of his occupation. The time is near when agriculture will be taught in the rural schools. Nature study is the first step in that direction. The leaflets are issued by the Pennsylvania State College under Prof. G. C. Watson and assistants, and can be had by all teachers who apply for them. At the time the subject is discussed specimens should be exhibited. Some of the subjects presented are cabbage-butterfly, clothes moth, spider, potato beetle, squash bug, tomato worm. There is no problem so difficult for the agriculturalist to solve as the economic relation of insects. It is well therefore for children to become acquainted with the life history of insects so that they may have an intelligent knowledge of those insects which are injurious and an appreciation of those which are beneficial. \$400,000,000 worth of agricultural products are annually destroyed by insects. The codling moth in one state alone costs \$3,000,000. The leaflets will awaken an interest in children; urge them to observe carefully, and record correctly.

Among many other representative farmers who attended the institute were the following:  
College township—Hiram Thompson, W. E. Tate, Wm. Everhart, Jas. Everhart.  
Harris—Frank McFarlane, Owen Mothersbaugh, H. E. Homan, J. H. Lonberger, Frank Brown, Jonathan Tressler, Henry Potter, Samuel Brown.  
Penn—Christ Alexander, Jacob Kerstetter, Aaron Ulrich.  
Miles—Joseph Meyer.  
Gregg—Emanuel Zeigler, Robert Musser, Wm. Goodhart, David Bartges, Ulrich.  
Spring—Perry Gentzel, Richard Brooks.  
Ferguson—Harrison Bloom.

Linden Hall.  
Lloyd Brown and family spent Sunday with friends at Centre Hall.  
Mrs. Loneberger, of the Wayside Inn, is housed up with grip.  
Mrs. Wm. Stover, of Boalsburg, visited friends at this place this week.  
Will Felding left for Philadelphia this week, where he has been employed for some time. Will is industrious, and deserves success.

W. J. Harter, of Coburn, had both the bones in one of his legs broken by a log rolling and striking him.

## TOWN AND COUNTY NEWS.

### HAPPENINGS OF LOCAL INTEREST FROM ALL PARTS.

See Grant Hoover before you insure. It is important to select good local officers.

Claud Stahl, son of James Stahl, is on the sick list.

Ex-Governor James A. Mount, of Indiana, is dead.

It is 3795 feet from the railroad station to the postoffice.

Hale Ross, the successful merchant, of Linden Hall, was seen in town last week.

Mrs. F. O. Bairfoot last week returned from an extended visit to Philadelphia.

S. B. Shaffer, of Madisonburg, moved into the Old Fort Hotel today, Thursday.

Go see the glass blowers above Murray's drug store. Only ten cents. It's worth a dollar.

Helen Breon, a little daughter of John Breon, west of town, is seriously ill with lung fever.

Thomas Bennage is proud of a little boy that came to his house Wednesday. A fine little fellow, indeed.

Rev. Warden is holding union meetings in the Reformed and Lutheran union church at Tusseyville.

George Brown, a farmer, of Yarnel, this county, died Saturday afternoon after a lingering illness from dropsy.

Smith Bros. have just received a car load of chamber suits, from the cheapest to polished quartered oak, on which they defy competition.

Sunday evening Rev. W. W. Rhoads pastor of the United Evangelical church, opened a series of meetings in their church at this place.

Rev. J. M. Reardon Sunday evening announced that he would begin a two weeks' series of meetings in the Lutheran church at this place, beginning Tuesday, January 29th.

At a Democratic caucus meeting in Harrisburg resolutions were passed condemning as traitors those Democrats who assisted in electing M. S. Quay to the U. S. Senate.

The Bellefonte Republican has no use for Representative J. K. Thompson, of Phillipsburg, since he voted for Quay. The Republican said awful nice things about Mr. Thompson during the campaign.

Homer Harry, who has for some weeks been in the hospital at Austin, suffering from the effects of an accident which befell him while working in the woods near his home, near Rebersburg, is not recovering as rapidly as was reported some time ago.

Mrs. Maggie Hess wife of Newton Hess of Pine Grove Mills, met with a very painful accident at her home. She was passing the stove when a vessel of boiling water was turned over on her, scalding her lower limbs and feet very badly.

Mrs. Mary Ward, of Pine Grove Mills, mother of Dr. J. E. Ward of this place, says the Bellefonte Daily News, narrowly escaped choking to death at noon Thursday of last week. A piece of meat became lodged in her throat and only the most heroic treatment released it.

Rev. D. J. Mitterling, well known to Centre county people, writes from Quincy, Michigan: Inclosed find P. O. order of one dollar for Reporter, commencing with your assumption of editorship. The Reporter has been a weekly visitor for many years; indeed I think since I reached sixteen years of age. It is, therefore in my actually necessary weekly reading.

W. M. Knoffsinger reports great activity in Greens Valley. Paper wood, match wood, and timber of all descriptions, is being cut and hauled to market. Mr. Swartz is conducting the match wood operations. The wood is of fine quality and used by the Bellefonte match factory. Mr. Knoffsinger stated that George Horner is the banner paper wood hauler, having filled a car of ten cords on seven loads, as returned by the Lock Haven paper mill.

K. H. Stover, the former railroad agent at Paddy Mountain, was recently transferred to the Millinburg station, which he will be able to conduct in the best possible manner. Paddy Mountain is the "High School" of the L. and T. railroad. It has turned out some excellent graduates, and among others are Messrs. Frank Bradford, at Centre Hall; A. N. Bitner, Pine Penna.; Phillip Bradford, Linden Hall, and now Mr. Stover. To be a real good station agent a course at Paddy Mountain is necessary. J. B. Wagner, who so ably filled the clerkship at Coburn, was transferred to Paddy Mountain, and Mr. Johnson, of Cherry Run, takes the place as clerk at Coburn.