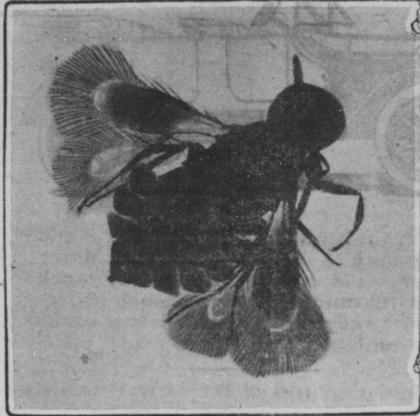




## A FEW OF NEW SPECIES OF INSECTS BRED BY STATE ECONOMIC ZOOLOGIST SURFACE TO DESTROY SAN JOSE SCALE



SIGMPTORA NIGRA



ENCYRTINE, THE NEW SPECIES



PERISSOMPTERIS MEXICANUS



SCALES PUNCTURED BY PARASITE



SOME NEW SCALE ERADICATORS

### NEW SPECIES OF SAN JOSE SCALE PARASITE DISCOVERED

State Economic Zoologist Breeds a Dozen Kind of Insects Dependent on to Save Fruit Trees

More than a dozen species of the parasite that is death to the San Jose scale have been bred successfully in Harrisburg by the division of economic zoology of the state department of agriculture, including one species as yet unidentified and unnamed. Whether this is an entirely new one is open to question, but none of the state's bugologists are on speaking terms with it and the federal men at Washington have been equally unsuccessful in placing it where it belongs.

The breeding here has been in the capitol greenhouses just south of the state house under the personal supervision of the state economic zoologist, H. A. Surface, who started horticulturists six months ago by announcing that the parasites had developed to a point where they were much more effective than the spray pump. Since then Surface and his men have been doing all sorts of things with the parasites.

None of the parasites have any common names, being known only by their scientific classifications. The new species that hasn't been identified is known only by the generic title of encyrtine, without having a specific appellation.

The encyrtine was found one day when a collection of the parasites was being examined under the microscope and suspicions that it was a stranger were at once aroused. When efforts at identification failed specimens and photographs were sent to Washington where similar failure was reported.

Not only have the state's bug experts successfully bred the parasites, but all the work in photographing them, etc., has been done in laboratories of the department of agriculture. All the parasites are nearly invisible to the naked eye and it is utterly impossible for even an expert scientist to differentiate between them without a microscope. The largest is no larger than a period in newspaper type, even with wings fully spread.

"Breeding" the bugs, in scientific language, is not only actually breeding them, as the layman understand it. "Rearing" would be a more descriptive term. The parasites are obtained by placing twigs on which they are believed to be in darkened cages; soon the parasites seek the light and are captured.

The parasite is such a successful warrior against the San Jose scale because the parasites breeds so much more rapidly than the scale. The scale is no slouch when it comes to increasing naturally, for it has the common housefly beaten on that score; but the parasite does even better. The life cycle of the parasite is only ten days or a fortnight, and it numbers its offspring by scores or hundreds; it also stays on the job about eight months of the year. No one yet has figured out in geometrical progressions just how many descend-

ants an able-bodied parasites will have in the course of a year.

The general structure of the parasite is not unlike the San Jose scale insect itself. It has six legs, two pairs of gauzy wings, antennae and, in the female, an ovipositor. It resembles a bee more than a beetle or fly. It can be found in all four stages of its life history under the shell that protects the San Jose scale.

The adult parasite, the winged female, lays her eggs by projecting her ovipositor beneath the San Jose scale's protecting shell. The egg hatches into the larva; the larva feeds on the scale insect, first on non-essential tissues and later on the vital organs, killing the scale; then the larva becomes a pupa, and from this chrysalis emerges the winged adult, which bores its way out of the San Jose scale shell. This makes it easy for the trained eye to detect trees on which the parasite is at work; instead of the tree being covered with the scale at work it is covered with punctured scale shells.

Hundreds of specimens of parasites have been sent out by Doctor Surface to orchards all over the state and he has reports that the parasite is doing its full duty. But even at that the division of economic zoology cannot begin to meet the requests for parasites. Professor Surface has hundreds of letters crowded into one file, requesting parasites. They are being filled in turn as rapidly as possible.

"I believe the San Jose scale is doomed," said Doctor Surface. "I do not mean that we shall ever get entirely rid of it, any more than mankind is likely ever to get entirely rid of smallpox. But we feel sure that the point is reached where the scale has ceased to be a menace. To its other natural enemies has been added the parasite, which seems to be the most effective of all. Adverse weather conditions tend to keep down the scale, while the red spider and several species of lady beetle also do their share. The horticulturists of the state have worked faithfully with the lime sulphur spray and now it looks as if the spray could be discarded as a weapon for general use against the San Jose scale, although that is something that cannot be fully decided until we have some more experience."

Go To The Central State Normal School, Lock Haven, Pa.

The Spring term of twelve weeks begins April 6. The total cost is \$56.50 if you are over seventeen years old and intend to teach. A thorough review of the common branches, special instruction in Pedagogy and an opportunity to observe teaching in the Training-school, are features of this term. Send for particulars and illustrated catalog to Dr. George P. Singer, Principal, Lock Haven, Pa.

The Penn Public Service Company is greatly enlarging its electric light and power plant at Philipsburg. This became necessary on account of the many new contracts the company received for power in coal mines.

### THE HORSE SALE.

Thirty-Three Kansas Drafters, Chunks and Drivers Sold Friday Afternoon.

A most successful sale of western horses was conducted at Centre Hall by Messrs. R. C. Yoder and Mr. Peabody, the former of Kansas, and the latter of Belleville, on Friday afternoon. The thirty-three animals sold for a total of \$7122, or an average of a trifle less than \$217. The average was cut by one horse hurt in shipping selling for \$122 and the two and three-year-olds that passed below the horse price.

The horses were Kansas stock, and reached here at about ten o'clock the night previous to the sale in a police car. The trip was a long one, but the animals were all in good spirits and showed up remarkably well for having just come off the car. The bidding was rather slow at first, but later became spirited. The highest price was passed for \$610, and the highest individual animal, a brood mare, was sold at \$61.

The sales were made on a cash basis, but a credit of three months was extended under the usual conditions by the Penns Valley Banking Company whose assistant cashier, C. D. Bartholomew, acted as sale clerk. The auctioneers were Huber, of the firm of Huber and Wise, Madisonburg, and George Benner of New Berlin.

The names of the purchasers of horses are given below:

- BELLEVILLE.**
  - J. B. Byler
  - Levi Yoder
- CENTRE HALL.**
  - Samuel Duest
  - T. L. Batters
  - Millie R. Meyer
  - Harvey Rose
  - Earl Ross
- REBERSBURG.**
  - Howard P. Weaver
- BELLEFONTE.**
  - S. C. Wittmer
  - J. O. Confer
- ZION.**
  - A. H. Vonada
- LOCK HAVEN.**
  - Noah Zimmerman
  - L. W. Strunk, Millburg
  - W. W. Hernan, Lemont
  - George Thompson, Avis

Another sale has been arranged for to be held some time in March.

Pipe Organ for State.

At a recent meeting of the senior class Pennsylvania State College the members decided to present a pipe organ to the college, to be placed in the Auditorium, as a class memorial. The class could not have chosen a more suitable gift.

### LEWIS WASHINGTON PARTY HEAD.

University Professor Pick for Governor Over N. A. Treasurer Yung by Vote of 17 to 22

The ticket of the Washington party was completed at a conference of a few of the members of the party, held at the Commonwealth hotel, Harrisburg, last week. The candidates who will appear before the people at the primaries in May, in addition to Clifford Pinchot, of Millford, who was elected some time ago by William Finn and others, are:

Governor—William Draper Lewis, Philadelphia, dean of the University of Pennsylvania law school.

Lieutenant governor—Percy F. Smith, Allegheny, jury commissioner, and publisher.

Secretary of Internal Affairs—Fred E. Lewis, Lehigh, present congressman at large.

Congressmen at large—Rev. Dr. C. S. K. Beaver, present member of the general assembly; L. N. Mitchell, Jefferson, lawyer; A. H. Walters, Cambria; and Arthur R. Ruple, Cumberland, the latter two long present members.

The conferees said that Lewis "had been invited to become a candidate." Judge Charles N. Brumm, Solvaykill, was not invited to be a candidate, but he will run anyway for Governor. It is said. Mayor Joseph Cauffel, of Johnstown, has also an idea he may be a candidate for Governor, but few other Washington party men include with his views. He was in Harrisburg the day before the foregoing ticket was selected and got some blank petitions at the State Department.

Dean Lewis is the choice of the Penn-Van Valkenberg circle of the party, since Van Valkenberg dropped Robert K. Young, State Treasurer. Young is considered out in the State as the strongest of the Washington party candidates. At the conference when a vote was taken on the question, however, Young got 17 votes, and Lewis, 21.

The candidates for Governor, including the two men who figured in the final vote, were H. D. W. Eglish, Pittsburgh; Judge Brumm, William Wilhelms, Solvaykill; and M. Clyde Kelly, Allegheny.

Kelly quit the race some time ago and the fight really narrowed down then to Lewis and Young.

The report of this conference, as given out after the general meeting, follows:

"We have concluded that it would be unwise for us, who have been suggested as candidates for Governor, to name any one of us as the only candidate. We therefore ask the conference to request some one person, who they may think the most suitable, to become a candidate, it being distinctly understood that such request does not bar any one from becoming a candidate before the voters at the primaries.

"The conference adopted this report and then, in order to determine the actual sentiment, placed the names of the several candidates before the members. As a result a resolution was adopted requesting Dean William Draper Lewis of Philadelphia, to submit his candidacy to the Washington party voters at the May primaries."

Deaths of Centre Countians.

Dr. George W. Twitmyer at Wilmington, Delaware. He was a son of Emanuel Twitmyer and was born in Spring township.

William Richard Gainford, in Bellefonte, aged sixty-five years.

Benjamin J. Schreyer, a former resident of Bellefonte, in Alliance, Ohio, aged fifty-nine years.

### ODD FELLOWS' ANNIVERSARY

Will be Held at Lewisburg This Year on Friday, April 24—Special Session of Grand Lodge.

Secretary Eberly of the Pennsylvania Odd Fellows' Anniversary Association, Williamsport, has sent out official notices for the thirtieth annual session of the association which will be held at Lewisburg on Friday, April 24. The announcement reads as follows:

"The annual session will be held at 10:15 a. m. in the hall of Lewisburg Lodge, No. 98 I. O. O. F., at which time the regular business will be transacted and such matters as pertain to the good of Odd Fellowship in this district will be considered. All lodges, encampments, cantons and Rebekah lodges, paying the annual dues, will be entitled to a voice and vote on all questions and deliberations that will properly come before the session. All organizations of Odd Fellows are invited and urged to join the association this year, and elect and send a representative, whether they have done so heretofore or not. This is not a secret session, and all Odd Fellows are invited to attend.

### THE PARADE

"There will be a grand parade in which all Odd Fellows are requested to participate, either with their own organization or to fall in with somebody. Every Odd Fellow should be in line and thus show his appreciation of the principles and beautiful teachings of Odd Fellowship, and his loyalty to those five noble men who ninety-five years ago laid the foundation upon which this great and glorious institution was built, which at the present time numbers into millions, and which has accomplished so much for the cause of humanity. We would recommend that where two or more lodges are conveniently located that they arrange jointly to hire a band and divide the expense, and thus reduce the cost to a minimum, and at the same time it will be an inducement for a larger attendance and will materially assist in making the occasion a greater success. Appoint a committee to complete this object without delay.

### THE PROGRAM

"A number of grand lodge officers will be in attendance, and a special session of the grand lodge will be held in the evening, at which time the past grand and grand lodge degrees will be conferred on all those entitled to receive them. The anniversary address will be delivered by Brother Fred C. Hanyan, grand master of the grand lodge of Pennsylvania, and the response to the address of welcome will be by Brother Usher A. Hall, grand secretary of the grand lodge of Pennsylvania. There will be other attractive features on the program to be arranged by the executive committee of the local organizations, who in conjunction with the citizens, will use their best energies to excel any previous sessions held in their beautiful town."

### THE COMMITTEES

The committee in charge of the anniversary is as follows:

Lodge No. 98—D. P. Higgins, chairman; J. C. Higgins, secretary; J. M. Pross, D. Kahle, C. A. Walters.

Encampment No. 157—O. T. Liddick, treasurer; C. I. Smith, S. W. Crabb, J. E. Zarfoss, J. O. Heiter.

### THE OFFICERS

The officers of the Anniversary Association are: President, Norman F. Funston; secretary, Henry R. Eberly; treasurer, Abe A. Myers.

### THE PINK LABEL

The PINK LABEL appears on this issue.

## TOWN AND COUNTY NEWS.

### HAPPENINGS OF LOCAL INTEREST FROM ALL PARTS

**THE DIFFERENCE**  
When a man is in love  
He loses his head,  
His hair he loses  
After he's wed.

The PINK LABEL appears on this issue.

James Fetterolf, the livvyman, is ill.

The coal bin is registering a considerable higher temperature now than it did for some weeks.

On Tuesday evening the Old Fellows of Millheim will hold a banquet at which the members of their families have been invited.

Calvin S. Bodt of Colyer is growing some heavy-weight Plymouth Rock hens, and a few days ago sold one that weighed just ten pounds.

H. D. Schlegel is plastering the dwelling house being erected by John H. Lucas. Most of the lathing was done by Messrs. George E. Braun and John M. Coldron.

The local order of I. O. O. F. will hereafter appear in new silk hats on all occasions that the lodge is represented in a body. The purchase was made through E. S. Ripka.

Harry A. Decker, who eleven years ago went from the Dauberman farm to Altoona, was in town for a few days, but last fall sold out and since has been waiting for something to turn up in his line.

John H. Puff, who was transferred by the P. R. R. from Centre Hall to the yards at Williamsport, was at his home over Sunday. While he likes the work there, he is undecided whether or not he cares to move his family to that place.

Dr. Ed. L. Miller of Johnstown is enjoying the southland, and is roaming through the Florida orange orchards for pastime. He is the guest of a friend, an optician, who during the summer months makes his headquarters in Dr. Miller's Johnstown office.

The average price of the horses sold at Centre Hall last week, which was \$225, is encouraging to the farmer who will have sale during the present month. While most of the horses pass between farmers, it is preferred to have a high rather than a low prevailing price, although not nearly enough horses are raised in the east to supply the demand.

A foreign mission service was rendered in the Reformed church, Centre Hall, on Sunday evening. The program was prepared by the Reformed Board of Publication, and contained besides the music a number of illustrations and valuable information on the work carried on by the Reformed church, and the work yet to be done. Several little children participated in the exercises and added to the general interest.

Clarence Bizer, who had been with Mr. and Mrs. H. L. Brooks since Christmas, on Saturday went to his home at Sellersburg on account of the death of his brother, Henry Bizer, and wife, who drowned in the Susquehanna river a few days previous, a brief account of which appears elsewhere in this issue. Mr. Brooks accompanied the young man to his home and will remain there until after the funeral.

W. F. Miller, supervisor of the L. and T. R. R., and A. S. Kiebs, the local foreman, were callers at this office on Friday. Mr. Miller called the foremen together at Centre Hall and with them went over some work already done and yet to be done on the local branch. Sawdust at the "White Station," at Grange Park, have been a source of great annoyance and expense each winter since the road was built, and it was nothing unusual to see an engine flounder in a deep drift at that point. Supervisor Miller set out to defeat the snow storm, and to date trains had clear sailing so far as the snow drifts were concerned.

A weekly weather report will hereafter appear in the Reporter. These are records of the highest temperature and the lowest temperature, the character of the weather, and the rain or snow fall for each day. The thermometers used by the local U. S. Weather Bureau are so constructed that the readings made at five o'clock in the evening will show the highest and lowest temperatures reached during the preceding twenty-four hours, and it is these figures that will appear in the report. The measurements of the rain fall is made by permitting the rain to fall in a cylindrical tube and pouring it into a tube one-tenth its diameter for measuring. By so doing it is possible to measure to a hundredth part of an inch.