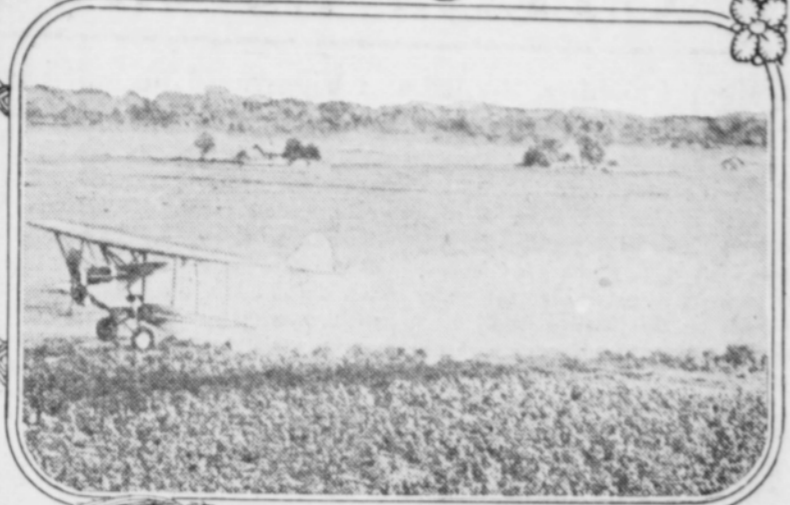


BOLL-WEEVIL

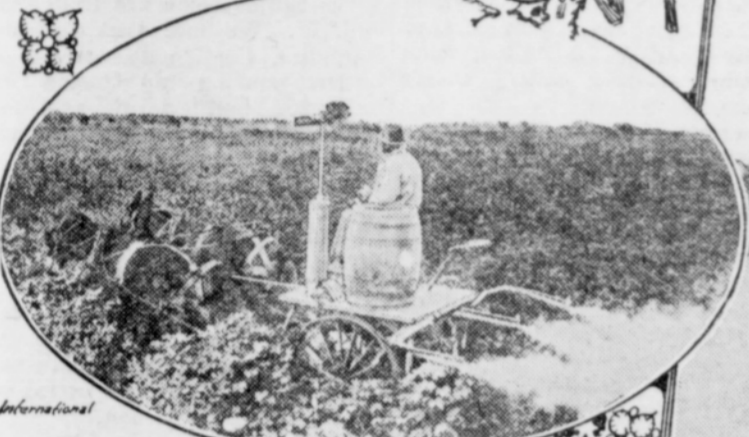
Pest, But Not Altogether an Evil



BOLL-WEEVIL MONUMENT
Courtesy of Good Hardware



DUSTING BY AIRPLANE



POISONING THE WEEVILS

By JOHN DICKINSON SHERMAN

OMIE day the bugs will get us—if we don't watch out. So say the entomologists. And other scientists say the bug men are quite right. What they mean is that the locusts, grasshoppers, beetles, borers, weevils and other pests of the insect world threaten to eat us out of house and home and starve us to death. They hold that the insect world is man's most dangerous enemy—so dangerous that only by eternal vigilance and unceasing warfare will the human race be able to survive.

In the meantime Uncle Sam, Entomologist, is authority for the official statement that a billion-dollar annual loss is inflicted upon our gardens, fields, orchards and forests by a hundred or more imported insect pests.

Mind you, Uncle Sam says, "imported pests." Offhand one would say that the earliest of these imported pests was the Hessian fly, which was brought over in the Revolution by the mercenaries hired by George III from a German prince. We treated the Hessians rough—you remember what George Washington did to them at Trenton—and the fly they brought in their straw packing has since destroyed enough of our wheat to pay the German war debt.

There has been a succession of these imported pests—ever since. So nowadays Uncle Sam has a small army at work fighting them. In the Agricultural department, for example, he has established the bureaus of plant industry and entomology and the insecticide and fungicide board. Through them he watches the ports to keep new pests out. He scours the earth for pest-resisting plants and for insects that prey on pests that prey upon us. He experiments with insect poisons.

A 23-acre farm which includes insect pests among its chief crops is operated at Vienna, Va. The American people pay some \$40,000,000 a year for insecticides and fungicides with which to combat crop pests, fungous growths and household vermin. At the Vienna farm the pests are permitted to reach their full measure of destructiveness; whereupon they are subjected to treatment with commercial insecticides and fungicides to determine the effectiveness of such preparations.

Right now there is a big controversy going on over the importation of narcissus bulbs. Uncle Sam says that after January 1 importation will be restricted. Why? Because these bulbs are frequent and abundant carriers of two pests: bulb-flies and the European eel-worm. The former eats onions and the latter onions, clover, rye, oats and potatoes. Both have already gained a foothold here.

Of all these imported pests the one to get most frequently under the lime-light is the Mexican cotton boll weevil. Scarcely a newspaper but has news of its doings or what is being done to it. For example, an item of current news is that an agricultural extension

service survey shows the cotton fields of North Carolina to be more heavily infested this year than last, in some cases as high as 50 per cent.

Another tells of the discovery of a germicide that will rid the South of the pest by a prisoner in the Atlanta Federal penitentiary who had been a Baltimore scientist of note.

A third is that the chemical warfare service of the United States army has been turned loose on the boll weevil with orders to find some poison that will put it out of business for all time.

Probably one reason for the persistent throwing of the lime-light on the boll weevil is the fact that cotton is one of our big crops. Some years it equals in value the corn crop. The cotton belt extends from the Atlantic to Texas and Oklahoma; probably it will be extended clear to the Pacific. And this American belt grows 54 per cent of the world's cotton. Our exports of cotton are about twice those of the rest of the world and we use 30 per cent of the world's production.

The boll weevil (*Anthonomus grandis*) is a gray insect about the size of a housefly. Both adults and grubs injure the cotton—the former by feeding, puncturing and laying eggs; the latter by feeding on the contents of the bolls. The boll weevil first entered the United States from Mexico in 1892, getting a foothold in southwestern Texas. Infestation spread slowly but surely. Climatic conditions made 1915 a year of catastrophe in the matter of infestation; no less than 86,840 square miles of cotton-raising territory were reported in bad shape. All told, the boll weevil has caused the loss of many million bales of cotton; also it has largely reduced at times the area devoted to cotton.

And yet the Mexican boll weevil, in its own way a top-notch crop destroyer, has not proved an unmitigated evil to all of the cotton-raising South. On the contrary, one Alabama town is actually grateful to it and has shown that gratitude by erecting in the public square a monument in its honor. This town is Enterprise and the inscription on the monument reads:

In Profound Appreciation of THE BOLL WEEVIL And What It Has Done as the Herald of Prosperity This Monument Is Erected By the Citizens of Enterprise, Coffee County, Alabama

Back in 1915 "Cotton Was King" in Coffee county. Then came the boll weevil and cut down the yield 60 per cent. In 1916 the whole countryside was wrecked and ruined. The wolf was at the door, for planters knew

nothing of diversified crops and the boll weevil had destroyed King Cotton. Writes Carl W. Dipman in Good Hardware (New York):

But the city officials and the business men got together. They decided something must be done and done quickly. They saw farmers leaving the farms and the young men flocking to the cities. They saw a dying Enterprise. So they began preaching diversification—for the first time in the history of that section. Within one year Coffee county broke the world's record in the yield of peanuts, for a similar area, and also in the return in dollars and cents for hogs and cattle shipped. The farmers raised their own hay, corn, potatoes and other produce for home consumption, which they bought previously, when they raised only cotton. Coffee county has now become a flourishing cattle and hog market, as well as a peanut market. Alabama now sells to the Middle West. Before, it bought only.

By 1918 and 1919, this entire section had learned the lesson of diversification. As a result, the whole county was rolling in prosperity. It was not until after the coming of the bug that Enterprise saw paved streets and sidewalks—paved at a cost of many thousands of dollars. The hardware stores did a flourishing business and the same was true of other stores. Several small factories came to the city and the post office rose from fourth class to second class. Handsome school buildings and fine churches, hospitals and beautiful homes were erected. All because the farmers learned to raise something besides cotton. Is it surprising, then, that on one of the principal streets of this little city was erected in December of 1919, a monumental fountain to the memory of the Mexican boll weevil? This monument stands today as the only monument ever erected to the memory of a pest, on the American continent. The much-dreaded boll weevil proved to be a blessing in disguise.

When it was discovered that calcium arsenate was just about the best combative against the boll weevil, thousands of "remedies" were taken into the South. Some of them were worse than the boll weevil. Uncle Sam's insecticide board was kept busy remedying the remedies. Now they have been pretty well regulated. So all the cotton planters are busy these days dusting their fields by man power, mule power, and even by airplane.

It's a fair guess that the boll weevil will come to a violent end before long—and by poison. Maj. Gen. Amos A. Fries, head of the chemical warfare service of the Georgia experiment station at Griffin. He has cotton plants. He is paying a cent apiece for live, vigorous boll weevils in lots of a thousand or more. He has at his command a mysterious lot of deadly poisons and gases developed in the World War. And he is out to get the boll weevil.

Merely a Phrase

The "fourth dimension" is only a mathematical phrase and has no real existence. A straight line is said to have one dimension; a surface is said to have two dimensions and a solid is said to have three. In working out complicated mathematical equations sometimes it is necessary to assume another dimension of space, the fourth dimension. No physical object has four dimensions. The fourth dimension

may be regarded merely as a hypothetical conception to explain certain equations in geometry.—Pathfinder Magazine.

To Be Thankful For

Counting up our mercies and our everyday reasons for gratitude, looking at the hundred little things and large things, gentle words, loving smiles, flowers sent to cheer us, children to greet us, old friends to advise, and middle-aged friends to uphold us, good books to read, dear songs

to sing, meetings in gladness, even partings in hope for the better life, we do not know where to end the list. The only thing to do is to live always in an atmosphere sweet and vital with thanksgiving.—Margaret E. Sangster.

Only Took Them Out

Patient—Good morning. I called to see if the doctor couldn't give me something for my tonsils.
New Maid—I'm sorry, sir, but the doctor never buys tonsils.—Good Hardware.

IMPROVED UNIFORM INTERNATIONAL Sunday School 'Lesson'

(By REV. F. B. FITZWATER, D.D., Dean of the Evening School, Moody Bible Institute of Chicago.)
(© 1923, Western Newspaper Union.)

Lesson for November 8

PAUL'S FAREWELL AT MILETUS

LESSON TEXT—Acts 20:18-38.
GOLDEN TEXT—"Ye ought to support the weak, and to remember the words of the Lord Jesus, how He said, It is more blessed to give than to receive."—Acts 20:35.
PRIMARY TOPIC—Paul a Loving Friend.
JUNIOR TOPIC—Paul's Farewell at Miletus.
INTERMEDIATE AND SENIOR TOPIC—An Example of Faithfulness.
YOUNG PEOPLE AND ADULT TOPIC—Responsibilities of Church Members.

After the uproar at Ephesus, the Jews laid wait for Paul to destroy him. This plot obligated him to retrace his steps through Macedonia instead of taking a more rapid sea voyage. He tarried with the disciples at Troas, meeting with them around the table of the Lord, and speaking words of encouragement to them. In order to be at Jerusalem on the day of Pentecost, he did not go to Ephesus, but sent for the elders of the church at Ephesus to meet him at Miletus. The picture of Paul's farewell to the Ephesian elders is a very touching one. His object in this address was to impress upon them their responsibilities. The analysis of his address has been so well made by Doctor Stiller that it is substantially reproduced here.

I. Paul Reviews His Three Years' Ministry at Ephesus (vv. 18-21).

1. The Spirit of His Ministry (v. 19).
(1) He was humble, "serving with all humility of mind."
(2) He was tender, working for them in tears.
(3) He was faithful in the face of trials which befell him because the Jews were lying in wait for him.

2. The Diligence of His Ministry (vv. 20-21).

(1) He made known everything which was of profit unto them. This every true minister or teacher will do.
(2) He taught both in public and in private. A minister's work is not done when his pupil ministrations are over. The effectiveness of his public work is sometimes determined by his touch with the people in their homes.
(3) He neglected no class, whether Jews or Greeks. The Christian minister must be exceedingly careful here.

3. The Theme of His Ministry (v. 21).

This was repentance and faith. Men and women need to repent of their sins and believe on the Lord Jesus Christ.

II. Paul Presents the Present State of Things (vv. 22-27).

1. His Immediate Purpose (v. 22). This was to go to Jerusalem. The constraint of the Spirit moved him to go forward though he did not know the things that should befall him there.
2. The Shadows Lying Across His Path (v. 23). Though bonds and afflictions awaited him, he went forward to his work with undaunted courage.
3. His Fixed Purpose (v. 24). This was to complete his ministry, which was to testify the gospel of the grace of God which he had received from the Lord Jesus Christ.

4. A Sorrowful Prediction (v. 25).

Those among whom he had labored should see his face no more.
5. He Leaves No Debt of Obligation Behind (v. 26-27). He was pure from the blood of all men.

III. Paul Sets Forth the Ephesian Elders' Responsibility (vv. 28-35).

1. Motives to Duty (v. 28).
(1) They received their call and commission directly from the Holy Spirit.
(2) The flock for which they must care was purchased with the precious blood of Christ.
2. Perils Ahead (vv. 29-30).
(1) Grievous wolves would enter the flock and mercilessly devour them.
(2) False teachers would arise from among their number.
3. Incentives to Watch (v. 31). Paul's own example. For three years he watched night and day with tears.

4. He Commends Them to God, and His Word (v. 32).

He knew that this Word was able to build them up.
5. He Was Unselfish in His Service (vv. 33-35).
(1) He did not covet any man's silver, gold or apparel.
(2) He labored with his own hands and taught.

IV. Paul's Prayer (vv. 36-38).

Having spoken these words he knelt and prayed with them all.

Patience

Patience is a beautiful trait, but it is not worn oftentimes by those who walk on life's sunny side in silver slippers. It is the product of days of adversity. "The trial of your faith worketh patience."—Evangelical Messenger.

No Room for Hatred

With a constraining love for Christ there is no room left in the heart for the hatred of any person for whom Christ died.—Presbyterian of the South.

Children Cry for



MOTHER:—Fletcher's Castoria is especially prepared to relieve Infants in arms and Children all ages of Constipation, Flatulency, Wind Colic and Diarrhea; allaying Feverishness arising therefrom, and, by regulating the Stomach and Bowels, aids the assimilation of Food; giving healthy and natural sleep.

To avoid imitations, always look for the signature of *Charles H. Fletcher* Absolutely Harmless—No Opium. Physicians everywhere recommend it.

Artificial Silk Expansion

One plant manufacturing rayon, or artificial silk, in the Netherlands, employs 5,000 people and plans to enlarge the output to include the making of artificial horse hair, artificial straw and other cellulose products.

Shuts Off "Snoopers"

A device to prevent eavesdropping outside telephone call-boxes is being tried at Fleetwood, England, post office. A "buzz" has been installed which comes into operation as soon as the caller closes the door. It cannot be heard inside the box, but prevents those outside from overhearing the conversation.

Fight on Luxury

An anti-luxury society has been formed in Tokyo by students. It hopes to induce the wealthy people of Japan to discontinue habits of luxury.

Money is the root of the manufacturing plant.



SAY "BAYER ASPIRIN" and INSIST!

Unless you see the "Bayer Cross" on tablets you are not getting the genuine Bayer Aspirin proved safe by millions and prescribed by physicians for 25 years.

DOES NOT AFFECT THE HEART

Safe Accept only "Bayer" package which contains proven directions. Handy "Bayer" boxes of 12 tablets Also bottles of 24 and 100—Druggists

Aspirin is the trade mark of Bayer Manufacture of Monoaceticacidester of Salicylicacid

Whistling Saved Ship

How a man standing on the Hartlepool (England) breakwater guided a fishing vessel into harbor, during a dense fog by whistling was told at a meeting of the port and harbor commissioners. So dense was the fog that the captain could not see where he was. Then he heard some one whistling, and called out, "Where are you?" Ascertaining that the voice came from the breakwater, he told the man to keep on whistling while he got his bearings. The man did so, and the vessel steamed safely into harbor.

New Motor Fuel

A new motor alcohol made from molasses and the juice of the sugar palm is said to make starting easy and eliminate knocking and carbon troubles. Its disadvantage is the cost of manufacture, but extensive experiments are being made in Hawaii to overcome this.—Exchange.

Valuable Watercress

Tradition and investigation have given to watercress a very high place among medical men for its real food value.

The miser hoards himself poor. Discontent is want of self-reliance.

Her Rheumatism Vanished!

After two years of agony, this woman thanks Tanlac for restoring lost health

For two years, *Mary Arpentigny, had rheumatism in her right arm and hand so bad she couldn't lift a comb to her hair. Indigestion made matters worse.
Finally her brother urged her to try Tanlac and improvement came with the first bottle. "Now," writes Mrs. Arpentigny, "my appetite is fine, my indigestion is gone and every sign of rheumatism has left me. I only hope others will profit by my experience."
*Authentic statement; address on request.

More people have been helped back to health by Tanlac than by any other tonic. Physicians testify to that. Our files are crammed with letters of grateful thanks from every part of the world. Isn't this evidence enough for you?
Don't go feeling worse and worse each day. Head off that sick spell. Start the Tanlac treatment today.
Ask for a bottle of Tanlac at your druggist's. Take it according to directions and see how much better you feel. We know what it can do for you because we know how it has brought health to thousands like you. It's folly not to make the test.

NOTE: For Constipation, take Tanlac Vegetable Pills, Nature's own harmless laxative.

TANLAC

FOR YOUR HEALTH