

SEVENTEEN-YEAR LOCUSTS HERE; MOTHS EVEN WORSE

Cicada Army Not the Most Destructive of Our Pests--How, Thanks to Ineffective Laws, We Yearly Import Creatures That Cost Us Millions--Despite All Efforts Moths Steadily Increase.

PROMPTLY on time, as foretold by the Government experts, the seventeen-year locust arrived in New York State last week, and for six weeks now he will spread himself over it and enjoy himself. The entomologists are unpleasant for the Mississippi Valley. They get the worst of the visitation, but the States as far South as North Carolina will suffer heavily from the invasion.

While the seventeen-year locust is devastating the East, an army of thirteen-year locusts is preparing to make a long march from the Mississippi Valley. This army will extend from Louisiana and Mississippi to Central Illinois and Indiana and Northern Missouri, throwing out outposts as far east as Georgia.

The locust is the most dreaded of our home-grown pests, but the damage he does is usually exaggerated by his sinister reputation. There is nothing exaggerated about the fear entertained of such foreign importations as the brown-tail moth and the gypsy moth, and it is an impressive fact that we are importing our pests from abroad.

This has given rise to a demand for a quarantine against such immigrants—a law such as is enforced in foreign countries.

The Federal and State Departments of Agriculture began preparing for the locust invasion last year. In New Jersey, for instance, State Entomologist John B. Smith sent broadcast a warning against too much pruning of trees, since trees would need all their vitality to protect them against the visitation of 1911. He also advised against setting out young trees, as there is no way to prevent the attack on the branches.

According to Entomologist Southwick of the New York City Park Department no very great damage is likely to be done to the park trees here, and Manhattan Island will probably escape almost entirely. He believes Staten Island and New Jersey will suffer most, so far as this neighborhood is concerned, from the assault of the locusts.

The locusts will be large, of course, but they will not damage the foliage of shade trees, because they do not live on such food. They ruin the young sprouts of trees by piercing them in order to find a place in which to deposit their larvae. In the last invasion, seventeen years ago, the locusts swarmed over suburban New York, and when they moved from one beleaguered point to another their armies obscured the sun in their flight.

This year's army will lie, in general, east of the Alleghany Mountains. There will be a few scattering attacks in West Virginia, Indiana, and Michigan. Our enemy this year is one of the best known among the various locust armies, having been thoroughly and carefully recorded on the occasion of former invasions. It has been reported in Connecticut reg-

ions to clear up these doubtful records.

Here is the distribution by counties of the army attacking us this year--which army, by the way, is known to the Government by the name of "Brood 2 of the 17-Year Race":

Connecticut--Fairfield, Hartford, Litchfield, Middlesex, New Haven.
District of Columbia--Throughout.
Indiana--Dearborn, Posey (?).
Maryland--Anne Arundel, Calvert, Charles, Prince George's, St. Mary's.
Michigan--Kalamazoo.
New Jersey--Entire State.
New York--Albany, Columbia, Dutchess, Greene, Orange, Putnam, Rensselaer, Rockland, Saratoga, Ulster, Washington, Westchester, and on Staten Island and Long Island.
North Carolina--Bertie (?), Davie (?), Forsyth (?), Guilford, Orange, Rockingham, Rowan, Stokes, Surry, Wake (?), Warren (?), Yadkin.

Pennsylvania--Berks, Bucks, Chester, Dauphin, Delaware, Lancaster, Lebanon, Lehigh, Montgomery, Northampton, Philadelphia, Pike, Potter, Schuylkill, Wyoming.

Virginia--Albemarle, Alexander, Amherst, Appomattox, Bedford, Buckingham, Campbell, Caroline, Charlotte, Culpeper, Fairfax, Fauquier, Fluvanna, Goochland, Hanover, Henrico, James City, Loudoun, Louisa, Lunenburg, Madison, Page, Pitt-

sylvania, Powhatan, Prince Edward, Rappahannock, Spotsylvania, Stafford, West Virginia--Brooke (?).

"When it" (the locust) "appears in large numbers," says the Bureau of Entomology, in a bulletin issued by its Assistant Chief, C. L. Marlatt, "it naturally causes considerable alarm and arouses fears for the safety of shade trees and orchards. The actual damage, however, is usually slight, except in the case of newly-planted orchards, and even here, by vigorous pruning back after the locusts, has disappeared, much of the injury caused by the egg punctures can be obviated.

"Ordinary repellent substances, such as kerosene emulsion or carbolic-acid solutions, seem to have very little effect in preventing the oviposition of these insects. Some more recent experience, how-

ever, indicates that trees thoroughly sprayed with Bordeaux mixture or lime wash are apt to be avoided by the locusts, especially if there are other trees or woods in the neighborhood on which they can oviposit.

"The most reliable means of protecting nurseries and young orchards is by collecting the insects in bags or umbrellas from the trees in early morning or late evening, when they are somewhat torpid. Such collections should be undertaken at the first appearance of the locusts and repeated each day."

While the locust is not as murderous as his reputation has led people to believe, no such charitable statement can be made about the other pests. Says Entomologist Marlatt in an article in the National Geographic Magazine: "The United States is the only great power without protection from the importation of insect-infested or diseased stock. Referring to European sources only, Austria-Hungary, France, Germany, Holland, Switzerland, and Turkey prohibit absolutely the entry from the United States of all nursery stock. Our apples and other fruits are admitted only when a most rigid examination shows them to be free from infestation. Most of the other European countries have very strict quarantine and inspection laws, and the same is true of the impor-

tant English and other colonial possessions.

"The United States thus becomes a sort of dumping ground for refuse stock. Diseased live-stock may be, and are, excluded by law, but diseased or insect-infested plants have no bar against their introduction."

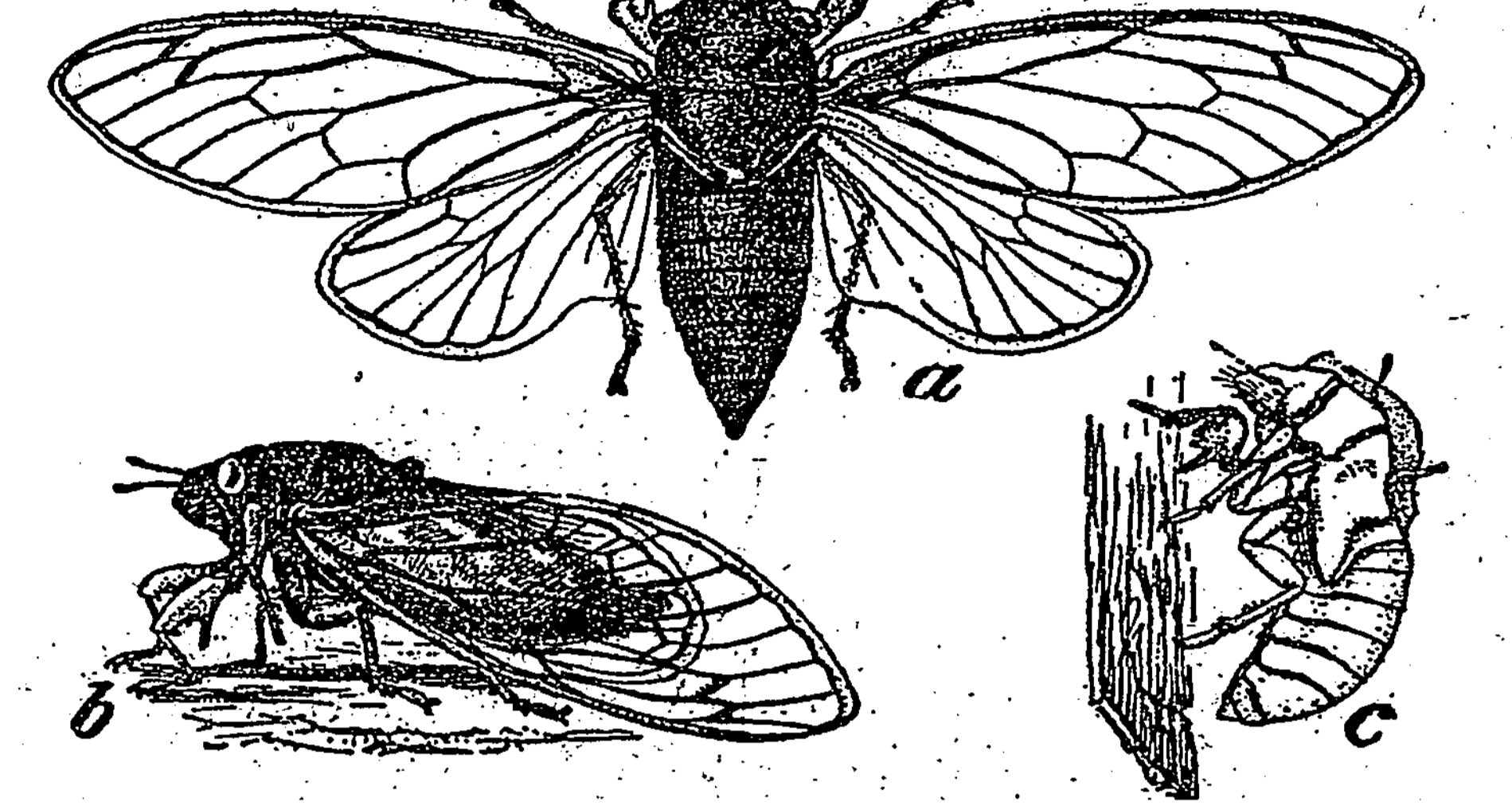
"We spend millions in combating such creatures as the brown-tail and gypsy moth. Most of this is spent by the States, but the United States appropriates \$300,000 a year for the purpose of fighting the destructive "moths" of New England.

All efforts to secure stricter legislation have been balked by nurserymen. What is the value of the interests to protect which the States have to spend these millions?

"The entire value of the imported nursery stock," declares Entomologist Marlatt, "as declared at customs, which is thus menaced by foreign pests. The importations of 1911 are again bringing in the nests of brown-tail moths, enormous numbers of which were imported in 1909 and 1910.

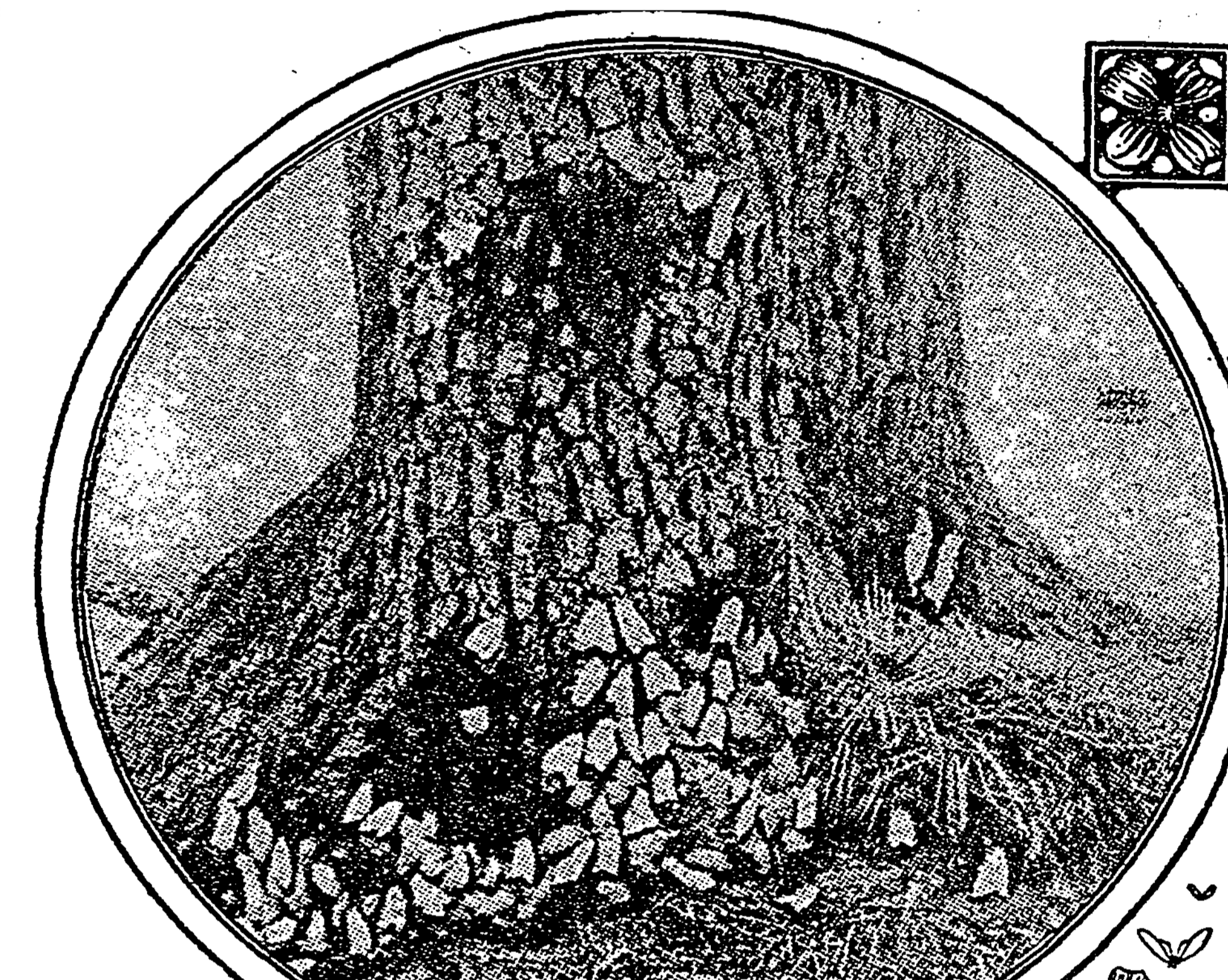
This infested stock, coming largely from nurseries in Northern France, has been scattered widely over the United States east of the Rocky Mountains.

Dr. J. B. Smith, entomologist of New Jersey, in testifying before the House Committee of Agriculture, called attention to the importation by large department stores of New York, Philadelphia and Washington and in large inter-

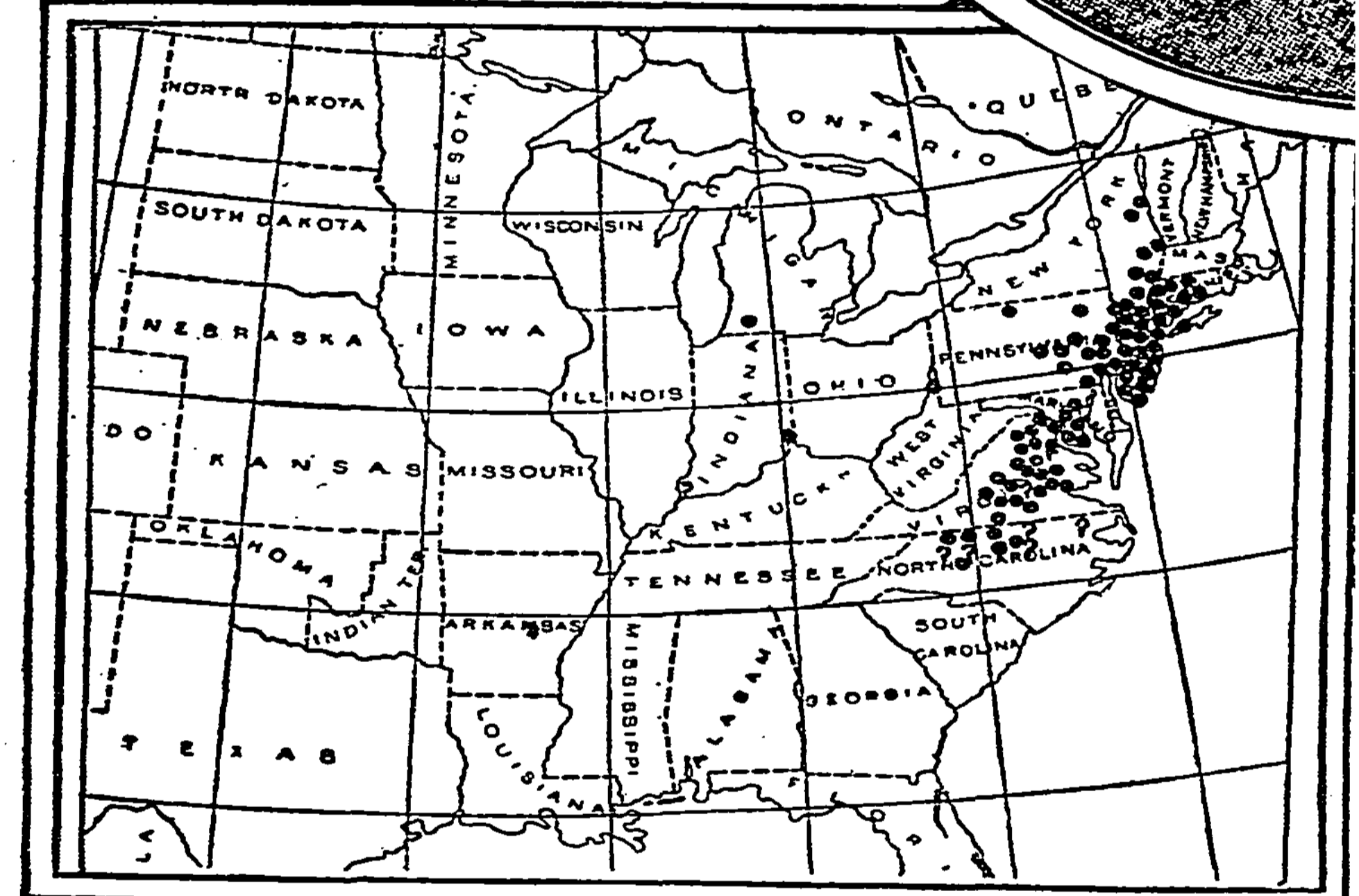


Gypsy Moth. (1) Male Moth; (2) Female Moth; (3) Male Pupa; (4) Female Pupa; (5) Egg Cluster; (6) Caterpillars, the Largest Less than Half-Grown.

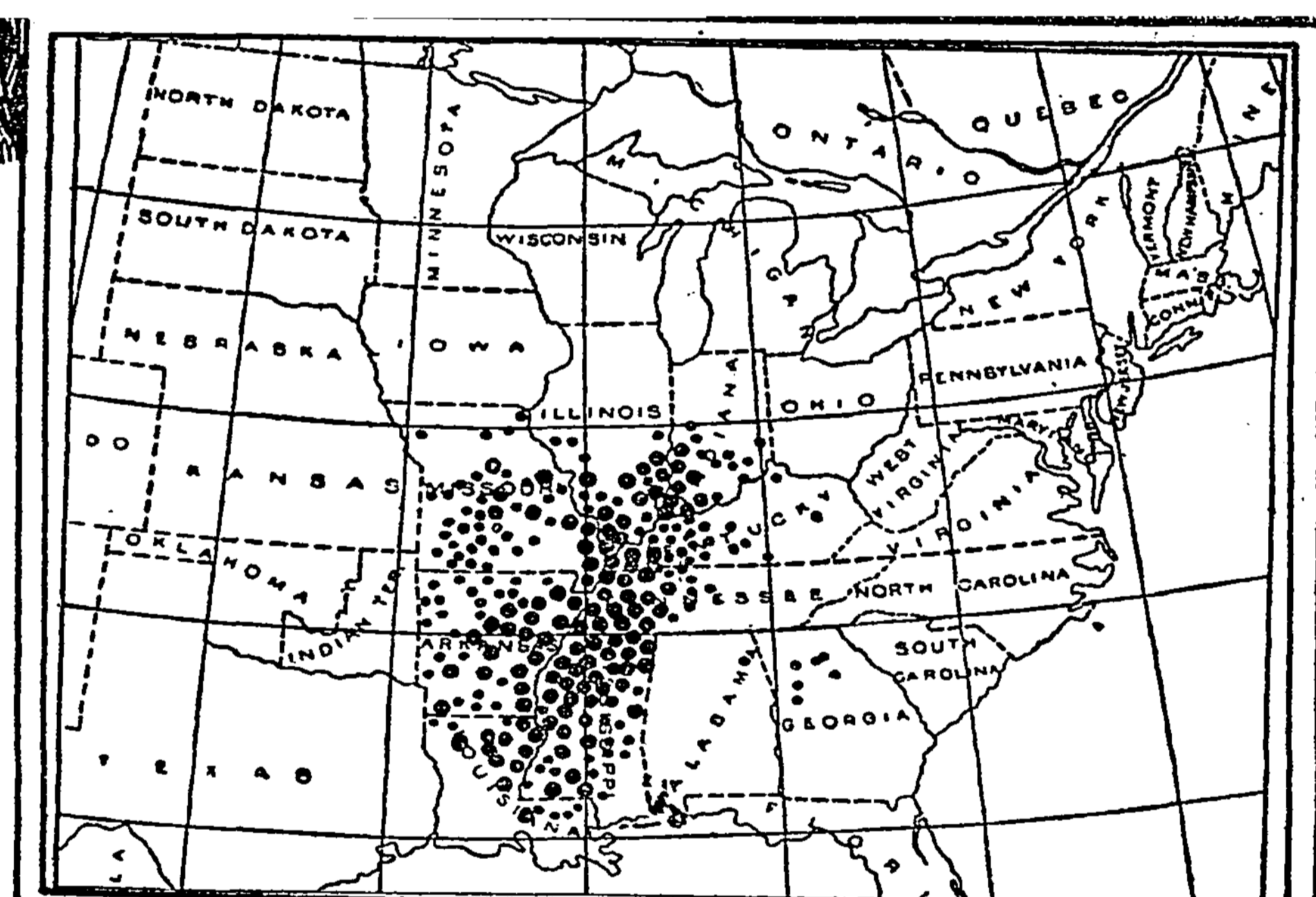
Female Gypsy Moths Depositing Egg-Masses at the Foot of an Oak Tree.



PHOTOS FROM NATIONAL BUREAU OF ENTOMOLOGY, WASHINGTON, D. C. COPYRIGHT 1911. Gypsy Moth Larvae Prevented from Ascending the Tree by a Band of Tanglefoot.



Line of March of Seventeen-Year Locusts This Year. The Dots Indicate the Counties.



Field of Operations by Thirteen-Year Locusts, Which Also Appear This Year.

ularly every seventeen years since 1724 and in New Jersey since 1775, and almost equally long records of it in other States have been made. When it last appeared, in 1894, it was carefully studied to determine distribution--in New Jersey by Dr. John B. Smith, in New York by Dr. J. A. Lintner, and in the other States by the United States Department of Agriculture, assisted by State entomologists and local observers.

"Some of the Southern records obtained in 1894," says a bulletin of the Federal Bureau of Entomology, "and this applies especially to localities in North Carolina, because of the appearance the same year of Brood 19 of the 13-year race, which, in New Carolina, may touch or overlap this 17-year brood." The bureau therefore urges Southern observers to report what they observe this year.

to other States. The infested New England States are now spending more than \$1,000,000 a year in control work, and the Federal Government is helping them with \$300,000--\$500,000 less than the total value of the importations which send these plagues among us. In spite of this enormous expenditure the gypsy and brown-tail moths are steadily spreading.

Extirpation is entirely out of the question," says the United States Agricul-

ture Department bulletin, "and all these expenditures must go on indefinitely at a probably increasing rate unless some natural check by means of parasites can be brought about."

William Reiff, an assistant professor in the Bussey Institute at Harvard, thinks he has found the enemy of the gypsy moth. He thinks they can be inoculated with a contagious disease known as "flacherie" or "moth cholera." The germs of flacherie are distributed among the gypsy moths while they are still in the caterpillar stage.

The culture is placed on the branches of infested trees and spreads among the caterpillars as soon as they begin to feed on the leaves. "The inoculation of the gypsy moth caterpillar," says Prof. Reiff, "is similar to the inoculation of a human being with a disease. The difference is that we are doing the best we can to make the disease spread, while the physician does all he can to prevent contagion.

"As far as we know there is nothing dangerous to a human being in the culture of the disease."

The brown-tail moth is dangerous to human beings as well as to plant life. The hairs of the caterpillar, which are exceedingly minute and sharp, go through the air and when they come in contact with a human hand or face settle into the skin, producing a painful disease now known as the "brown-tail rash." Breathed into the lungs they may cause inflammation and prove fatal.

All of the Government investigators who have studied the brown-tail moth have been seriously poisoned. Two of them have had to give up their work and go to the Southwest to recover from pulmonary troubles superinduced by the irritating hairs of the moth, and one man died from internal poisoning caused by it.

The brown-tail moth first appears in egg clusters on the under side of leaves during July and August. The eggs are deposited in elongated brown masses of 200 to 400 eggs.

Caterpillars appear the latter part of

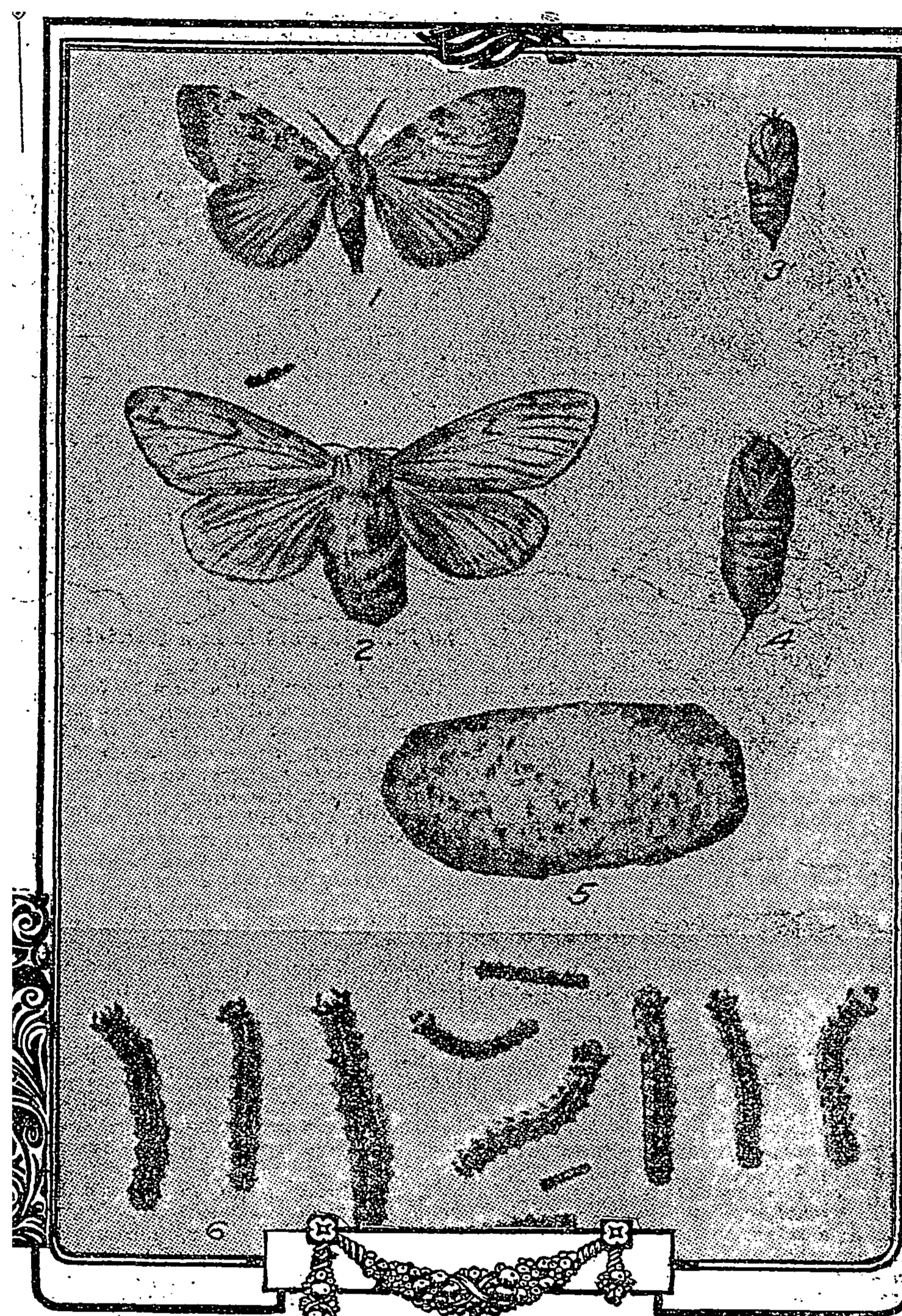
August or first of September. They draw leaves together with "webs" and make nests usually about half the size of one's fist, where they remain "protected" until Spring. The caterpillars, in the Spring are from one-quarter to one-half inch in length. They are so abundant and disgusting that they have driven people from their homes. Property values in residential districts depreciate wherever they become established.

Cocoons are spun among the leaves, the last of June or the first of July. Moths appear early in July. They are white, with a conspicuous tuft of golden or brownish hairs at the tip of the abdomen.

"Collect the Winter nests from October to April," advises the New York Department of Agriculture, "and burn them. Spray trees during early May and in August with arsenate of lead at the rate of five pounds to fifty gallons of water. Band uninfested trees with a sticky substance to prevent ascent of caterpillars. Specimens of any suspected insects should be securely packed and sent by mail with name and address of sender to the Department of Agriculture, Albany, N. Y., for identification."

As for the gypsy moth, egg masses from July to May may be found on the under side of leaves, on fences, stone walls, on houses near the ground, or on the peak under the cornice, and on the bodies of trees from the ground up. The egg masses are of a conspicuous buff or skin color and fit and oval in shape. Caterpillars appear in April and May. They feed at night and rest under cover in daytime until July. The mature caterpillar has along the back a double row of five pairs of blue spots, followed by a double row of six pairs of red spots, which distinguish it from other species. Caterpillars in August and soon die. The New York Department advises as follows:

"Paint egg clusters with creosote in Fall, Winter, or Spring. Spraying in June with arsenate of lead is an efficient treatment. Band trees with burlap and examine daily."



Seventeen-Year and Thirteen-Year Locust. (a) Adult; (b) Same, Side View; (c) Shed Pupal Skin.

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SALE OF FRIENDLESS DEAD MEN'S CHESTS

THE most gruesome auction sale that was ever held took place on last Tuesday in Washington City. It was held by the Treasury Department under a recent law of Congress.

The subject matter of the sale consisted of the property and effects of American citizens, who had died in foreign lands, which had been unclaimed by relatives or heirs of the deceased persons. For the last half century this property has been collected from all quarters of the globe from all manner of sources, chiefly through the agency of United States Consuls, Ministers, and Ambassadors abroad.

There finally accumulated such a mass of this unclaimed property that the Treasury Department recently called upon Congress to authorize a sale of it, which was accordingly done. There were nearly a hundred dead men represented at the sale--and by every kind of personal effect.

It was a collection of "ships and shoes and sealing wax and cabbages and kings." Old heirlooms, trinkets, jewelry, strange money of strange countries, guns, watches, Prayer Books, diamonds, and forged bills of exchange were a few of the items put up on the block to be "knocked down" to the bargain hunter. The sale was attended by several hundred people, and the articles sold brought in many cases ridiculously high prices.

A lot of Guatemalan money of the face value of \$98.00, for instance, (left by one Porter, who died an unknown number of years ago in that country), and which is practically worthless, did an American, who, after spending \$100,000, sold for \$24.00. The purchaser did not state what he expected to do with it. The most valuable thing sold was a pair of diamond earrings, left by Mrs. Harcourt, whose place of death is not recorded. The pair brought \$57.00.

Pocket-books predominated, mostly empty of contents. They came rings, rings of every description, from the diamond to the plain gold band and, in one case, twenty-four rings that were merely marked "cheap."

Watches, mostly of cheap make, were also much in evidence; they were for the most part of the gold-filled or silver type, but some far above their value in many cases, illustrating the Great American passion for being "done" in a bargain.

There was an occasional Prayer Book; but the revolvers outnumbered both these--and the Bibles only brought twenty-five cents apiece!

One American citizen who died in far-off Cathay, left only a box of cartridges, "chest" and he was merely referred to as number 112. One would like to know more of a man who had seen fit to "cash in" that far from home and leave an estate so essentially billigerent.

While the articles were the property of those who had died in strange lands and without friends either there or at home, some of the things were inherited by the proceedings with some solemnity and attention--there was little of either business affair, as though it had been a question of the estate of a man who had died in Tibet, or the snows of the Andes; he sang his sing-song, "Going, going, gone" with the same indifference as if he had had an hour before auctioned off a second-hand set of bedroom furniture.

Not even did the auctioneer attempt to dwell upon the romance that must surround the belongings of a man who had died in Tibet, or the snows of the Andes; he sang his sing-song, "Going, going, gone" with the same indifference as if he had had an hour before auctioned off a second-hand set of bedroom furniture.

Altogether the Government cleaned up nearly \$500 on the sale--which is small reward for the trouble it had been put to in collecting from all parts of the earth and conserving the heterogeneous collection. Yet even that money it will not get.

The cash brought at the sale," said Charles H. Butler, chief of the Diplomatic and Consular Division of the Treasury, "will be turned into the treasury to the credit of each dead man's estate. If his heirs should ever turn up, it will be paid to them.

Such an event is hardly likely, however, since most of the men have been dead for years, and when the fact of their deaths were made known to the Government, every step possible was taken to locate the persons entitled to the dead man's property."

"Since, notice of this sale was given, however," continued Mr. Butler, "we have been deluged with letters from all parts of the world, in which people inquire about relatives of the writers who years ago departed for distant countries and have never been heard from. Many of these letters are from wives begging for information about missing husbands and desiring to know if their names are on our dead men's list. They would all make a good deal of money if they were true."

"We have not been able to locate a single person who has been inquired about, and all our dead men appear to be without friends or relatives."

Before the sale Mr. Butler showed a sack full of stuff, which he called the dead men's chests," as he called the pile. Each "estate" was neatly done up in a package and labeled with the name of the dead man, if known, and the time and place of his decease.

"One of the men of the genus of Herkules Holmes," he said, "might be able to tell a great deal about the history and personality of many of these poor fellows on Now, here is a man, J. D. Garner by name."

"It is odds that he fought under the Confederate flag in the civil war and left

for the tropics in disgust after Lee's surrender, taking his household goods with him in the shape of the family silver, and he never been heard from since."

He showed a bundle that contained a lot of silverware, knives, forks, and other table stuff, a Confederate bond for \$1,000, two Confederate bills for \$100, and one for \$10.

"Small doubt," he continued, "but that Garner, who died in Panama three years ago, treasured these things as souvenirs of the lost cause, and evidently treasured these things above all else, for he left but the other property."

One of the most interesting of the "chests" shown by Mr. Butler was that of Patrick Dowd, who years ago died in the heart of the Andes, far above La Paz, Bolivia, which is itself up in the Andes.

"This dead man," said Mr. Butler, "is the brother of a Sherlock Holmes; was an Irishman, he was a Roman Catholic. He was a wandering trader, and accustomed to doing all kinds of dangerous things, and situations. The proof? Just see these articles that make up his chest. And this is what Patrick Dowd left in the way of worldly goods when he shuffled off this mortal coil in the snows of the Andes:

"A Winchester rifle, 540 cartridges; a silver watch and chain, thirteen razors, a pair of scissors, a gold ring, twenty-four cheap rings, a Bible, a Key to Heaven, (a Catholic Prayer Book) and a folding cot or camp bed.

From all which he who runs may read as plainly as did Mr. Butler just what manner of man was Patrick Dowd."

Without doubt the most remarkable sale in this collection of dead men's "chests" is that of Hermann Schneider. He died some years ago on the coast of a ship while on his way to Europe. His "chest," outside some few personal effects, consisted of a number of blank bills.

"When we received the property," said Mr. Butler, "we sent the signed bills in exchange to the banks which had issued them, asking payment to be made to us. In reply we were informed by the banks that the bills were forgotten! Evidently Hermann Schneider was with his forged bills when death himself 'rapped' out him down."

Coin and money of the following nations were among the effects sold: German, emelian, Bolivian, Hindustan, and other parts of India, Chinese, French, Portuguese, Spanish, Turkish, and German.

No such collection of dead men's "chests" will hereafter be allowed to collect on the hands of the Treasury officials. Every two years an unclaimed property of those dying abroad will be sold and the proceeds held for those who may thereafter prove a title to the money. And among all this heterogeneous collection there was only one article that had a name--and that was a pipe bearing the name "Frank C. Wilmeth."