



Cornelia Clarke Photo

THE CHINCH BUG UNMASKED

Enlarged up from their natural pinhead size, chinch bugs show the markings of their tribe: the white-winged individuals are adults, the wingless ones are immature specimens.

Here again they can be attacked, by burning the grasses during December, January and February.

The individual chinch bug is a very small insect, no bigger than a gnat. Under a moderately strong lens, the adult displays a pair of glistening white wings, which have given it the second half of its scientific name, *Blissus leucopterus*. *Leucopterus* is made up of a pair of Greek words meaning white wing. The young bug has its growing wings packed away in a pair of stubby cases on its back, and is marked with a white band.

The average citizen is more apt to remember the chinch bug by its odor than by its rather insignificant appearance, for it smells most disagreeably when crushed. In this it is true to its tribe, for it belongs to the same general group that includes squash bugs, stink bugs and other malodorous citizens of bugdom.

Unlike many of our most serious insect enemies the chinch bug is not an immigrant. It is a native-born racketeer, which has always lived in the Southwest. It did not adopt a career of crime, however, until white settlers brought it "easy pickings" in the form of cultivated crops.

There is a second species, the turf chinch bug, which has lately been making

itself a major nuisance on golf courses, especially in New York and surrounding states. Entomologists at Cornell University are now endeavoring to find some

kind of gas attack that will stop its depredations without ruining the fairways and greens.

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AGRICULTURAL ECONOMICS

Partly Empty Grain Bins Hold No Bread for Soldiers

PROMOTE peace by filling your powder bins, is a stock argument of preparedness advocates, made familiar by much repetition.

Less familiar, but conceivably at least as legitimately arguable, is the thesis that the tottering peace of Europe may receive a little added support from this country's partly empty grain-bins.

Dr. James Brown Scott, of the Carnegie Endowment for International Peace, inquired a few days ago, "Without having the United States as the base of hostile operations from which to obtain an ever-increasing supply of arms and ammunition, and indeed foodstuffs, would the World War have lasted as long as it did?" And he pointed out that in a great war the belligerents, their own industrial and agricultural output diminished, always looked to accessible neutral powers as magazines of supplies.

If war should come, it is quite conceivable that overwhelming public opinion in this country might prevent sales of munitions or metals to the belligerents. But it might be more difficult, ordinarily, to obtain a popular mandate for an export embargo on foodstuffs and other agricultural products.

Right at present, however, even that might be strongly supported, simply because the average citizen has become a bit uneasy about having bread enough for himself. The first spring crop estimate of the U. S. Department of Agriculture indicated a probable harvest of 435,499,000 bushels of winter wheat, with more than an additional 93,699,000 bushels carried over from last year's crop. Since then, new dust storms have been raging, and what they may have done to the standing crop has not yet been determined.

"Adequate supplies for domestic requirements," says a leading agricultural spokesman. But that cheerful estimate significantly omits any allowance for rations to go into somebody else's haversack.

True, some of the European powers,

by the most strenuous kind of artificial encouragement, have boosted their own wheat production to a point of proud self-sufficiency. But let Hans and Jacques and Ivan lay down the scythe for the sword, leaving the womenfolk behind to tend the crop, and this self-sufficiency will soon begin to wear pretty thin.

Other grain areas—Argentina, Australia, India? Perhaps; but when delivery in a hurry has been a factor, the better organized North American facilities have always functioned first.

Moreover, practically all the great extra-European wheatfields, outside the United States, are not to be counted as neutral. They are dominated by Great Britain, either by actual political ties or through economic set-ups. The one great neutral cupboard is Uncle Sam's, and though he fears no famine for himself, he has no spare loaves this year to hand out to disturbers of the peace.

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CHEMISTRY

"Gas Attacks" Improve German-Grown Tobacco

SMOKERS are sometimes accused, by wisecracking friends, of conducting gas attacks. Less grounds for this accusation may some day be found in tobacco which has itself been the subject of a gas attack. Experiments pointing in this direction were reported by Dr. G. Pfützer and Dr. H. Losch. (*Die Umschau*, March 10)

Drs. Pfützer and Losch subjected German-grown tobacco to treatment with ethylene and other gases, during various parts of the fermentation or "ripening" process. These gases are the same as those used in the United States to speed the ripe coloration of fruit and the opening of cut flowers. The results, as tested by skilled tobacco judges, were noticeable improvements in both the color and the smoking qualities of the leaves.

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