

CONTROLLING THE CEDAR RUST DISEASE

By H. S. REID.

The cedar rust of apples is more or less widespread in the eastern and central portions of the United States. It is reported from New Hampshire to North Carolina on the Atlantic seaboard and westward as far as Iowa and Nebraska. The disease is not found except in regions where both apples and red cedar grow. The red cedar is very abundant in some parts of the eastern States, and in those sections there is a great deal more of the disease than in any other portion. The principal reason for this lies in the fact, that, along with the abundance of cedar trees, the large commercial apple orchards contain many varieties which are particularly susceptible to the disease. Orchards in the vicinity of cedar thickets have usually suffered more severely than those which are situated at some distance. The injury is more marked if the orchard is on the leeward side of the cedar thickets, where the spores of the disease may be continually borne in by prevailing winds, but all orchards of susceptible varieties of apples suffer more or less from the cedar rust. Two years ago, the financial loss to apple growers in the State of Virginia alone was estimated to be upwards of one-half million dollars, and this did not take into account the loss due to weakening of the trees and to impairing the vitality of the fruit buds for the following year, which would surely diminish each succeeding crop.

The cedar trees in the vicinity of apple orchards develop, during the winter, and early spring, a large number of croaky galls, which are commonly spoken of as cedar apples. These galls contain the winter spores and slowly mature during the warm days of late winter and early spring. When the weather becomes warm enough and there is abundant moisture present, the cedar apples thrust out many gelatinous tendrils. So long as the gelatinous material is damp the spores do not escape to any extent, but, if bright, sunny days with brisk winds follow, the watery tendrils are dried and the spores are blown away from the cedar apples. The wind, of course, blows these spores where it lists, but only those which are carried to apple trees find conditions which are suited to their germination and future development.

How far these spores may be carried has never been definitely determined. Our observations and studies go to show, however, that if an orchard is one-half mile from the cedar the amount of rust infection is usually not great enough to be a serious injury to the orchard. Any cedar trees which are cut after March first should be burned, since they retain the ability to cause infection for two months.

CARE OF THE BROOD SOW.

As the breeding season approaches it is necessary to have the sows in the best of condition. Animals intended for breeding purposes should be matured but not fattened; if immature animals are to be used at all, they should be at least eight months old before being bred.

During pregnancy, sows should have abundant exercise and a variety of feed. During the winter months, unless extra care be taken, brood sows are particularly liable to lie in their quarters and become inactive. Effort should be made to induce them to exercise. This may be accomplished by having them travel around the barnyard for feed, or by housing them some distance from their feeding place, or by making them root for grain scattered under litter on a barn or shed floor. They should not be



Abroad of Good Conformation.

given too much of any one kind of feed. If excessively fed, corn is particularly objectionable.

Proper Distance for Planting.

Currents and gooseberries, three to four feet apart.
Raspberries and blackberries, three to five by four to seven feet apart.
Strawberries for field culture, one to two by three to four feet apart.
Strawberries, garden culture, one to two feet apart.

Some Crops!

Secretary Houston of the department of agriculture, has announced that the value of all farm crops, farm animal products, and farm animals sold and slaughtered aggregated \$9,872,936,000. That was \$83,000,000 more than the grand total for 1913, the previous record year, and more than double the value of all farm products in 1899.

Twenty-five dollars "for scrubbing of the tombstones of my neighbors in the graveyard" was one of the peculiar bequests in the will of Mrs. Margaret E. Schmidt, on file for probate in Belleville, Ill.

HOW TO GROW A BOSTON FERN.

The Boston fern is one of the oldest and best known varieties; owing to its graceful, drooping habit of growth it is sometimes called the "fountain fern." One immense plant seen by the writer is about five years old and has some fronds which measure over eight feet from tip to tip. It has



A Five-Year-Old Boston Fern, Some of the Longest Fronds of Which Measure Over Eight Feet from Tip to Tip.

been nourished about twice a week with a weak solution of "fish scrap" water.

The "scrap" referred to, is obtained from a "menhaden" factory, and is the dry product after the oil has been extracted from the fish. To obtain the best results, it is well to grind the scrap very fine, add about two tablespoonful to a gallon of water, which must be well stirred before the necessary portion is applied to the soil.

Generally speaking, the crowns of all ferns should be kept well above the earth which should be kept quite damp, but not sodden. Very little spraying of the foliage is advisable, as the plants are nourished almost entirely from the roots. Young and tender plants must be shielded from heavy rains and strong winds. Maiden-hair ferns need especial care, for if once permitted to become very dry, the fronds shrivel quickly; they must also be kept from a gas heater or lighted rooms. In potting all plants it is well to put a piece of coarse muslin in the bottom of the pot before putting in bits of stone. This keeps the drainage good and prevents the earth from washing away.

PRICES OF SPECTACLES.

Retail Buyer Will Not Be Affected by the New Advance.

The action of the manufacturers of optical lenses in advancing prices from 25 to 30 per cent to wholesale and retail dealers will probably, it was said yesterday, not affect for the present prices at which the public has been buying spectacles and eyeglasses. Retail opticians seen yesterday, among them some operating their own grinding plants, do not appear anxious to add to the higher cost of seeing. The sentiment in the trade is to go slow in making advances to the user.

C. F. Goddard, a lawyer, of 15 William street, acting as a champion of the army of users of spectacles and eyeglasses, has written The Times pointing out why he thinks the retail opticians are not justified in making an advance in price to the user commensurate with the raise made by the manufacturer. Mr. Goddard says:

"The really interesting fact, which your news gatherer failed to mention is that the optical lens for which, ground to prescription, the wearer now pays his optician \$1.50, costs the optician at wholesale from one and a half to three cents. The announced advance will, at the maximum, advance that cost from, say, two and a quarter to four and a half cents."

Retail opticians, commenting on Mr. Goddard's letter, said that the writer's figures and deductions refer to low grade lenses. According to the opticians, it is a common experience for a retailer to pay 45 cents to the manufacturer for a rough lens slab, while some come as high as \$7.50 each. The latter, however, are polished and otherwise finished, although not completed. Should the retailers follow the lead of the manufacturers and advance the higher grades of lenses to the consumer, prices, it is said, might exceed the figures quoted by The Times correspondent, but at present prices are likely to remain stationary.

Woodrow Makes 'Em Work.

Washington Star. People who think that all Congressmen have to do is to sit around Washington and tell stories are getting scarcer every year.

Last year was Germany's greatest in the production of coal and iron.

THE PANAMAIS ARE A LOT OF MONGRELS, LAZY AND SHIFTLESS

While They Have the Reputation of Being Treacherous They Showed Their Best Side to the Visitors From the Great Northern to Panama City—A Man Who Spoke Half a Dozen Languages—An Obliging Conductor—The Statesmen of Panama Go in For Glitter and Tinsel, and Are Riotously Spendthrift With the People's Money—Panama Town a Type of the Old Spanish City.

By HOWARD A. BANKS.

The books on "Panama and Its People," and similar titles, are not enthusiastic over the Panamanians. They describe the men as selfish and lazy and the women as frowsy and unsocial. The people on our boat seemed to concur in this opinion. The Sweet Girl Graduate spoke representatively when she said, looking over at the slimy jungle around Gatun Lake where reptiles and fever germs have their home:

"Like country, like people—both treacherous."

I have an opinion that the old view of hostility and prejudice to the Panamanians will have to be revised. While a passing look-in such as we had could not be absolutely convincing, I confess that I liked the mongrel folk of Panama. I did shopping in their stores and walked with them in their narrow streets and sat with them in their plazas and rode with them in their street cars—and was always treated with courtesy.

A Panama Linguist.

One man was particularly interesting. He was yellow skinned and tall and said he was "of Danish extraction." I fancied there was a liberal infusion too, of Spanish blood in his veins, though he did not boast of it. He said that he could converse readily in a number of languages—Danish, Norwegian, "Russian-Finnish," German, French, Spanish and English. He certainly spoke correct English. I drew him out to talk about things in general.

"Panama City," said he, in an outburst of genuine enthusiasm, "owes a debt of gratitude to the United States. This place was dead before the United States came here. It has taken on new life since you came. You have cleaned up our city. You have driven away sickness and disease. You have given us sewers and drainage, and are treating us to keep the laws of health. You have done us much good."

Every other store in Panama City is a saloon. I said to this gentleman: "You seem to have plenty of liquor establishments," and he replied: "Yes, about 95 per cent of them ought to be closed up." "Best Balboa Beer" was what every one of the shops claimed to sell. One saw that sign everywhere. With the liquor flowing at it does, I saw a great many people drinking, but none drunk or staggering.

Flirting Senoritas.

I bought a very pretty cloth flower—an imitation of a pink rose-bud—from a black skinned senorita who had a basketful of them. I pinned it in my buttonhole, and all through the streets that evening women-folk smiled pleasantly at me, showing rows of milk white teeth, and some nodded their heads knowingly, as much as to intimate that it must have been pinned there by some girl. I did not understand at first why I was attracting this notice but I suppose I have guessed the answer aright.

In the Plaza of Santa Anna, beautifully tiled and a paradise of palms and colored flowers, I spoke to a tall, sun-tanned man of the South, cool in his linen suit and his wide-brimmed Panama hat. He was sedate and dignified but answered every question.

On the Street Car.

The next day I passed the same plaza in a street car. The conductor was a short stocky Panamanian. I asked him the name of a wide-branching tree gorgeous with scarlet blossoms. He told me. I forgot the name now. But he did not fail of his own accord after this to point out what he thought would be of interest to a stranger as the car squeezed speedily—too speedily—through the alleys they call streets. He was a bit too debonair—a little too familiar. A bare-headed woman of ginger-cake hue carrying a baby of the same tint boarded the car and seated herself opposite to me. "Oh, you like the Americano, I see," said the conductor, and laughed heartily at his joke. The woman took no notice of it.

The doorways and balconies were full of naked children, ranging in color from black to yellow. The houses are usually two-storied with a long balcony up-stairs. They have no windows. The city seems to be typically Spanish, and is decidedly picturesque.

The Great Northern and the Kroonland had both emptied tourists into the city, and the Panama hat

shops were full of them. I saw a beautifully woven Panama at \$6.00, which would have easily been worth \$15.00 at home.

The Panama Gentry.

The Panamanian, as pleasant as he was to the tourists of the Great Northern, is said to share the proverbial hatred of the Mexican and the South American to the "Gringo." There are two social shades of caste in the upper classes—the descendants of the Conquistadores, who usually depend upon land estates, which graze cattle, for their incomes; and families with foreign blood in their veins whose wealth comes from industrial sources. These two classes furnish the politicians of Panama. The parties are the Liberal and Conservative, and their political animosities are described as being very bitter, extending even to society. The tendency in the Panama law-making body is to squander public funds, as to do the grand thing.

Panama offers unusual facilities to water transportation. Its coast lines are long, and its short rivers are usually navigable. Good roads built from the ports back into the interior would open the country to wonderful development in lumbering, cattle grazing, mining, fruit-growing, etc.

But Panama misses the point. In 1910 the National Assembly voted to tie up the reserve capital of the country in an expensive railroad whose usefulness was doubtful. It has wasted money in national theatres and national universities, which make an imposing appearance, but rarely ever see a performance or draw an exceedingly limited number of students.

The Shiftless Masses.

Below these two classes of gentry, are the great masses of the people. They are shiftless and lazy. There is a great deal of free land and many of the people squat where they please. There are two breeds of Indians, the Cholos and the San Blas. The former have interbred with the peoples who have emigrated to the Isthmus, but the latter, 20,000 strong, who are in the northeastern part of the country, boast that they have never been conquered, and that "no San Blas woman has borne a half breed and no San Blas man has fathered a mongrel." Except for this strange tribe, as jealous of their racial integrity as the Jews, it is said that no native of Panama is of pure blood.

The Exploiting Foreigner.

Too lazy to make the most of the richness of natural resource at their doors, the Panamanians have left it to the foreigner to exploit their country. On every systematically cultivated farm, a foreigner is the foreman.

The religion is Roman Catholic, but it is said that only the women are very religious. The men are said to be for the most part free thinkers. The vast bulk of the congregations are made up of women. They love their seistas, or fiestas, and we had the privilege of seeing a fiesta procession, largely composed of gaily dressed children, parading through the streets of the city of Panama at night singing anthems to the beat of a monotonous drum.

I liked what I saw of these simple children of the far South. They have a long road to travel to the higher plains of civilization, but it seems to me there is outcome in them.

SMOKING IN CHURCH

Strenuous Efforts Needed to Stop Use of Weed.

London Express. Mr. Spurgeon confessed to a love for a good cigar, and many years ago Doctor Parr, when vicar of Hatton, smoked regularly in the vestry during the hymn before the sermon.

It was in the seventeenth century, however, that strenuous efforts were needed to stop the use of the weed in church. The Cambridge authorities, for example, declared that no graduate, scholar, or student presume to take tobacco in St. Mary's Church upon pain of final expelling the University.

In America the authorities went further. The Puritans enacted that any one smoking on the Sabbath "within two miles of the meeting house shall pay twelve pence." Perhaps the most striking characteristics of the salvationists who have been making London picturesque is that not one of them smokes.