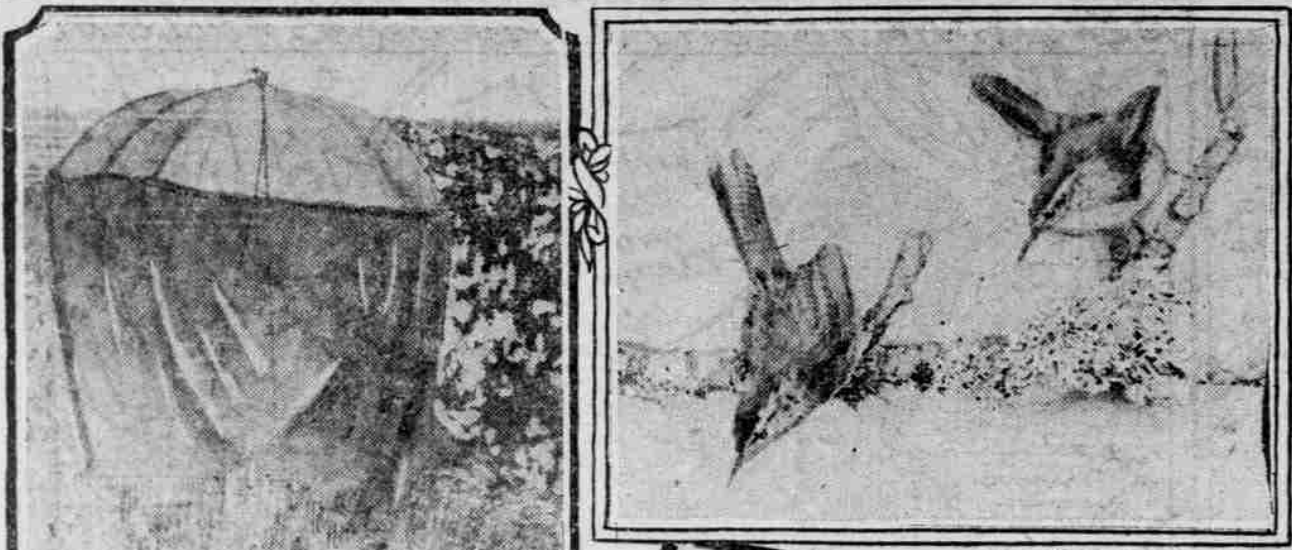


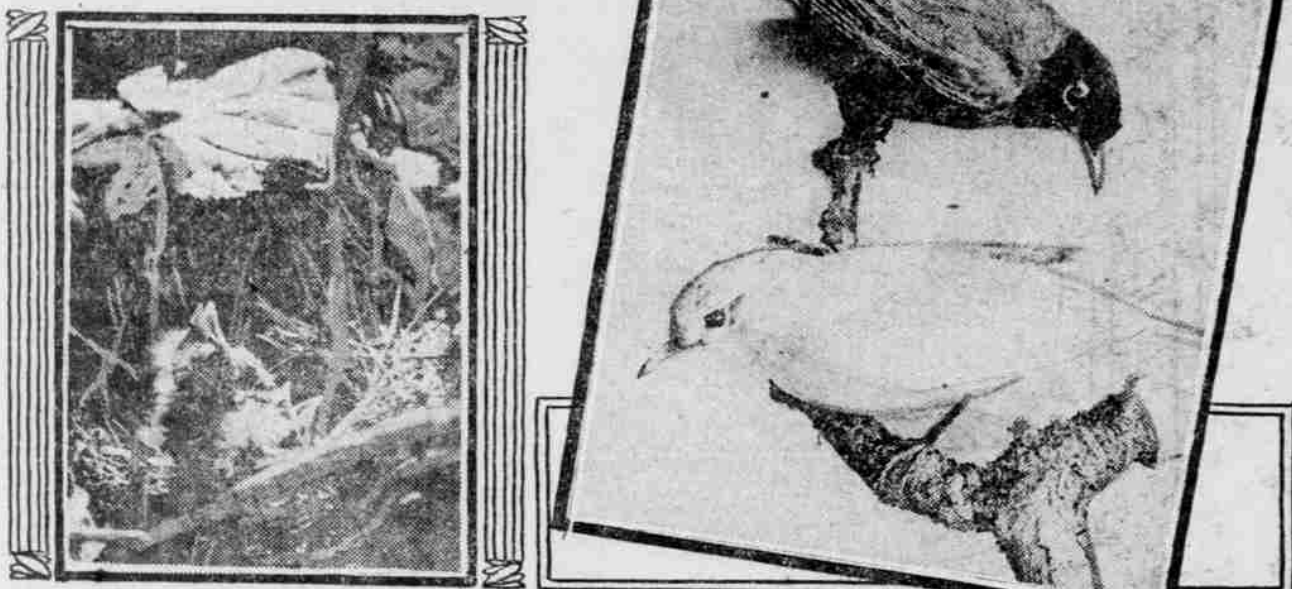
ROBINS AND OTHER BIRDS FRIENDLY "PESTS" TO GARDENER, SAYS SCIENTIST

But for Feathered Insect-eaters Garden Losses Yearly Would Be Increased by Millions—"Protect Crop, but Save Birds," Suggested as Slogan—Particular Service Rendered by Number of Species.



Seattle Wren.

Blind For Observation of Birds Laid in Field and on Nest.



Two Hairy fledglings.

Western Robins. The Female Is An Albino; An Unusual Color Phase In The Plumage Of Robins.

THE truck gardeners of the United States are losing \$50,000,000 a year as a result of the ravages of pestiferous insects. This amount, were it not for the birds, would be augmented by six million more dollars. Nearly everybody these days has at least a home garden in which he not only takes a wholesome pride but also derives considerable satisfaction and some profit. How would it seem, I wonder, to get up some morning and find his promising tomato plants laid low by the treacherous cutworm? Such a thing is liable to happen at any time, but the danger is not nearly as great if a russet-backed thrush or a robin, or even a meadowlark is nesting near the back yard. For these birds are especially fond of the greasy cutworm.

ten stomachs of the northern violet-green swallow, collected between Arizona and Alaska, were examined by a federal expert and were found to contain the following percentages of insect remains: Leaf bugs, 35.56 per cent; wasps and bees (no honey bees), 17.48 per cent; beetles, 10.5 per cent; ants, 9.42 per cent; flies, 7.36 per cent. In spraying the proportion of flies increases to 50 per cent.

Swallows Get Gnats. Almost all of these insects were taken on the wing. Watch some evening, as the twilight is gathering, and you will see the swallows darting hither and yon. Downward they will swoop to scoop up a gnat. Or they may dodge, now this way, now that, to snap a midge or a wandering bug. Practically all of the birds visiting the home garden, whether insectivorous or seed-eaters, feed their young ones on soft-bodied insects or larvae. Only last week a pair of English sparrows, notorious seed-eaters, began making regular trips from the garden and fruit trees to a nook under the eaves of my house. For several days past they had been interfering with the feeding of a pair of robins. One violet-green swallow, so I shot the

wind and spray from the side where the wind will carry the spray toward the plant. By watching you can often catch the wind in various quarters and spray different sides of a large plant, bush or tree with the wind from each direction.

The underside of all the leaves must be carefully wet with the spray, as well as the upper side, as it is often the underside where the insects congregate. Also the inside of curled-up leaves must be reached.

Vegetables Have Many Diseases. Wholly aside from the outside insects, which prey upon our plants and about which we have heard so much, they have diseases of their own that afflict them. Of course plants suffer, just as children do, from what we call malnutrition—lack of enough food, or of a "properly-balanced ration." We will consider this later under the heading of sprays.

But plants also are afflicted sometimes by minute vegetable parasites that fasten themselves upon them and live off of them. These are called fungi, and a spray that will destroy them or prevent their growth is called fungicide. Fungi produce diseases known variously as rust, smut, mildew, blight, rot, etc., on vegetables and on many other plants.

These fungi are really tiny, thread-like plants that, growing on the surface of other plants, just as those plants grow in the ground, get their food from these plants and weaken them so that the leaves may fall off, the fruit become spotted and decayed or the plant will die.

These fungi are like mushrooms, their seeds explode like powder, shooting in every direction. The wind carries them for miles at a time, so there are few plants that are not infested with them. They are ready to grow under favorable conditions.

These conditions are generally moisture and heat combined. The spores need actual water, like rain or dew, to germinate, and this explains why our roses and other plants are so apt to mildew in wet weather, especially if it is also too warm.

After the spores become rooted on the foliage of the plant they grow by sucking up the juices of the life-fluid causes an illness similar to robbing our body of blood.

We cannot control the weather, except in not watering our plants too much—especially those plants subject to mildew and other spore diseases—but we can strive to have our plants strong and vigorous to resist disease.

Here is another place where plants are just like people. It is the delicate, weakly that become ill more readily than the strong. The strong, sturdy ones resist the attack of the enemy and come through unscathed, while the weakly must strive to keep our plants strong and sturdy by good cultivation and also by keeping them free from destructive insects.

One Spray for Diseases and Insects. As we have to spray some things for blight and others for bugs (or possibly both at once on the same plant), why not combine them and spray with one material? It is entirely possible to do so, as the ingredients mix readily and will not harm any plant, even if nothing at all is the matter with it. Indeed it is advised to combine them to spray some plants—beans, for instance—as soon as they come through the ground as a preventive of blight, which is very common. This is of course, most necessary in sections where damage from blight is to be expected.

But as the combined spray cannot hurt our plants, it appears particularly to the inexperienced gardener who may not know just what does all his plants, but will be glad to have read "Fung-Bugs," which is very convenient. It is prepared by using about seven gallons of water with one pound of the powder should be applied when the disease appears and repeated every ten days or two weeks as needed. Make only one mixture to use each time as bordeaux mixture cannot be "kept over" till another time.

For the combination spray which I mentioned at first, our local seed houses have a very good preparation called "Insecto" or "Insecto Bordeaux."

COVERALLS Keep Kids Klean

Reg. U. S. Pat. Off.

HERE is just what every mother wants at a price any mother can afford! Koveralls—the ideal suit for boy or girl, for every day wear the whole year 'round. The suit that stands in a class by itself for convenience, style and long wear. Practical, healthful, economical.

Youngsters dressed in Koveralls can romp and play in any way that brings the most fun without fear of getting "mussed up and dirty." Call them in at "dress-up" time and slip off the Koveralls! See the underneath togs dainty and clean—the little bodies white and unhurt—no bruised or infected skin. Koveralls keep out the dirt thoroughly and protect the stockings and underclothes.

Koveralls will not rip, no matter how rough and tumble the play. Made in one piece, with drop back; easily slipped on or off. No buttons in front to hurt tender bodies or scratch furniture. Easily washed. No tight elastic bands to stop circulation or retard freedom of motion. Long or elbow sleeves; round or Dutch neck. Two weights in a variety of durable fabrics and colors, trimmed with bands and pipings in contrasting fast colors. Ages 1 to 8 yrs.



The Garment Protects Your Child The Guarantee Protects You

Buttons are stitched over cords and the buttons stay on. Double stitching and triangle of cord at top of pocket seams.

\$2.00 the Suit And Up At Good Dealers

Caution: Before you buy be sure this label on the neck of each suit. It is our guarantee.



MOTHERS—Write for Folder in Colors, showing fabrics, and 6 Cut-out Dolls—sent Free



Made and Guaranteed by LEVI STRAUSS & CO., 151 1/2 Pine Street, San Francisco

Chats With Home Gardeners

EAR FRIENDS: It was not my purpose to unite both insect enemies and diseases of plants, as we have recently had a fine series of articles on this subject, but Professor Lovett's work on Oregon Agricultural College, who wrote the articles, called my attention to the fact that he only wrote of the insect enemies of plants and not at all of the diseases to which plants are subject, and those plant diseases should be discussed.

The garden spray calendar, which I give you today, is also well worth your consideration, as it collects and presents in systematic form Professor Lovett's advice, with others, making it much easier for reference.

If this garden spray calendar is kept in a place where it will be conveniently for common use, you will usually know at once what is the trouble with any plant that is not doing well. I will also give the formulae for the various solutions and other preparations mentioned in the calendar, as some of you may not have Professor Lovett's work or may like to have these.

We Must Have a Spray Pump. Before we can use these various remedies for insects and plant diseases, we must have a spray pump with which to apply them. This spray pump should be a good-sized, substantial pump having power enough to throw the liquid through a hose and material that will not corrode when acids are used in it.

These sprayers with brass containers, holding three gallons, can be purchased at hardware stores, hardware stores and other places. The price varies so much that it pays to look around a little before purchasing, and by the time three or four salesmen have explained them to you, you will understand the differences in them and exactly how to use them. One with a brass container should last you for years if taken care of, so it pays to buy a good one.

How to Use the Spray Pump. If you buy a spray pump that is hung from your shoulder by a strap it is easily handled, even though it contains many pounds of liquid. A single pumping charges it with compressed air, which will force out the liquid for perhaps ten minutes, and you can walk through the rows of plants, applying the spraying material to the top, the sides and the underneath in a short time.

Above all things, when you do use any of the sprays recommended, spray thoroughly. Partial or weak spraying is little better than none.

Brush the whole plant, from root to tip, in thorough saturated stems, branches and leaves. One spot un-

GARDEN SPRAY CALENDAR table with columns: CROP, NAME OF PEST, TIME OF WORST INJURY, NATURE OF INJURY, CONTROL.

which has been made for the special purpose of saving the grower the time and trouble of making up and combining bordeaux mixture and the arsenate of lead mixture. It is especially recommended on fruit trees and garden crops, and is equally effective on potatoes. The directions for mixing this dry powder into a spray with water come with the package, about one pound of powder to seven gallons of water being used, as with bordeaux mixture.

Important Notes—(1) These dry-powder preparations are much better than the old paste preparations, as the pastes only keep their strength for six months or so, while the dry-powder mixtures retain their strength for practically an indefinite time.

(2) In using all these dry powders diluted into sprays remember that they are corrosive in their action on the parts of your spray pump which they touch. If you rinse out your spray pump very carefully with clean water after each spraying your pump will last many times as long, so be sure to do it.

Next week we will discuss the sprays and other preparations for fighting insect enemies.

Your garden neighbor, INEZ GAGE CHAPPEL.

RESORTS IN FULL SWING

California Offers Many Attractions to Eastern Visitors. SAN FRANCISCO, June 12.—California's famous resorts will be in full swing of their summer season when the national democratic convention meets here late this month.

Those who come here by the central route will pass Lake Tahoe in the Sierra Nevada mountains at the center of the state's eastern border. South of Tahoe about 100 miles is Yosemite valley with its great redwood trees.

Only a few miles north of San Francisco, across the Golden Gate, is the John Muir grove of redwoods at the foot of Mount Tamalpais, and another noteworthy grove is in California Redwood Park, about 100 miles south.

Along the coast are the seaside resorts of Del Monte, Santa Cruz and Santa Barbara, which range southward to the Los Angeles district, where are located Santa Catalina Island and a half dozen beaches. On San Diego bay, not far from Tijuana on the Mexican border, is Coronado.

Among the interesting points near San Francisco is Stanford University, 20 miles south down the peninsula on the tip of which this city is built. Twenty miles south of Stanford, San Jose lies in the center of the Santa Clara valley deciduous fruit district.

Across the bay eastward from San Francisco is Berkeley, home of the University of California, and adjoining are the shipyard cities of Oakland, with approximately 150,000 inhabitants, and Alameda, with about 40,000.

The state capital, Sacramento, is midway between San Francisco and Lake Tahoe. Provisions Assured Danzig.

WARSAW, June 12.—A treaty was signed in Warsaw, recently between the free city of Danzig and the republic of Poland, assuring Danzig of a liberal supply of provisions until the end of the harvest.

TURN HAIR DARK WITH SAGE TEA

If Mixed With Sulphur It Darkens So Naturally Nobody Can Tell. The old-time mixture of sage tea and sulphur for darkening gray, streaked and faded hair is grand.

Nowadays, though, we don't have the troublesome task of gathering the sage and the mussy mixing at home. All drug stores sell the ready-to-use product, improved by the addition of other ingredients, called "Wyeth's Sage and Sulphur Compound."

It is very popular because nobody can discover it has been applied. Simply moisten your comb or a soft brush with it and draw this through your hair, taking one small strand at a time; by morning the gray hair disappears.

One of what delights the ladies is that, besides beautifully darkening the hair after a few applications, it also produces that soft luster and appearance of abundance which is so attractive.—Adv.

Hot, Sultry Nights rob Nature of the chance to rebuild, by refreshing and restful sleep, the wasted tissues of the body. That limp and prostrated feeling caused by wakeful, restless nights is quickly relieved by



LYKO Tonic. The Great General Tonic. Sold By All Reliable Druggists. Sole Manufacturers: LYKO MEDICINE COMPANY New York Kansas City, Mo.

Weak Eyes Lavoptik

There has never been anything in Portland with the QUICK results of simple witch hazel, camphor, hydrastis, etc., as mixed in Lavoptik eye wash. In one case of weak, inflamed eyes a few days' use of Lavoptik brought about surprising results.

What Causes Falling Hair?

Sometimes it is dandruff, sometimes it is "Alopecia Pityrodes," and then again it may be some other of the many hair and scalp ailments.

Prof. John H. Austin (OF CHICAGO) 40 Years a Bacteriologist, Hair and Scalp Specialist. Says that the only certain way of determining hair and scalp troubles is with a powerful microscope—

and once the cause is known, it is then a simple matter to stop the trouble. Free Microscopic Examination of the Hair and Scalp. Find out how to stop that falling hair before baldness overtakes you.

Private Offices at the Owl Drug Co. Broadway and Washington

New, Positive Treatment to Remove Hair or Fuzz

Women are fast learning the value of the use of delatone for removing hair or fuzz from the face, neck or arms. A paste is made with some powdered delatone and water and spread on the hairy surface. In 2 or 3 minutes it is rubbed off, the skin washed and every bit of hair has disappeared. No failure will result if you are careful to buy genuine delatone.—Adv.