INVESTIGATING THE WOODPECKER



an acorn or other nut. Where this mischief done, bird is abundant all dead trunks or branches of any size, and many live ones, are punctured with these holes, frequently less than an inch apart. Where trees in the proper condition are not numerous enough it attacks buildings and drills holes in the coralso it bores into telephone and telegraph poles and fence posts.

For the laboratory investigation of the food of the California woodpeck-



Yellow-Bellied Sapsucker.

er, 84 stomachs were available. The food was found to consist of 29.59 per cent of animal matter, to 77.41 per cent of vegetable.

acorns. This amounts to 53.30 per sapsuckers practically do not feed it sometimes destroys the value of cent of the yearly diet and was found on wood borers or other forest enein 58 stomachs. Where almonds are mies. Their chief insect food is ants. southern basswood, spruce and westfor this nut and stores it instead of of trees, and they drink a great deal acorns. In some cases it has been of sap. order to save the crop.

of the California woodpecker is not of fore, that the birds' attack on trees has the whole head and throat red. much economic importance. It does may have serious results. When a Great care should be taken to disnot prey extensively upon the prod- small proportion of the bark and tinguish sapsuckers from woodpeckucts of industry, except occasionally cambium are removed, the vitality of ers. upon almonds, and its insect diet contains practically no useful species. Its worst sin is its propensity to puncture the cornices and casings of buildings and telegraph and telephone poles in order to store its nuts for winter use. This is a serious injury and will justify the destruction of the bird if no other remedy can be devised.

The red-bellied woodpecker ranges over the United States as far west as central Texas and eastern Colorado. and as far north as New York, Mich igan and southern Minnesota. It is rather more of a forest bird than some of the other woodpeckers, but it is frequently seen in thinly timbered coun-

In Florida the bird has been observed to eat oranges to an injurious extent. It attacks over-ripe fruit and picks holes in it and sometimes completely devours it. The fruit selected is that which is dead ripe, so it is not often that the damage from this source is serious. The bird also sometimes attacks the trunks of orange trees, as well as others, and does some

For investigation of the food of the red-bellied woodpecker 271 stomachs were available. The food was found



California Woodp cker.

to contain 30.94 per cent of animal matter to 69.06 of vegetable. The former consists of insects and spiders, with a few tree frogs and lizards,

western Oregon. It from August to February inclusive. much of its living. A peculiar habit the Florida orange groves. The con-

has attracted much attention among tents of the stomachs, however, show nonscientific observers, that of drill- that the wild fruits are preferred, and ing holes in tree trunks or largo probably only when these have been branches, in each of which is placed replaced by cultivated varieties is any Three-toed woodpeckers are found

to be very beneficial. These are residents of practically all parts of the United States. The great bulk of the food of these birds consists of the larvae of wood-boring beetles or moths. These are eaten with great regularity nices of houses or spires of churches; throughout the year, but somewhat more in the colder months than in summer. The total of wood-boring larvae, including both caterpillars and beetles, found in the food of these birds, amounts to 77.13 per cent. Their vegetable food may be included in four items: Fruit, mast, cambium and rubbish. The foregoing shows that these woodpeckers act as "conservators of the forest" in the strongest sense, as three-fourths of their food consists of the direct enemies of forest trees. It is unfortunate that in most places three-toed woodpeckers are not very numerous, and for this reason they should be protected and encouraged in every way possible.

Of the several species of woodpeckers in the United States only three may be properly classed as sapsuckers. These birds have short, bushy tongues, not adapted to the capture of insects, while the other woodpeckers have tongues with barbed tips which can be extended to spear luckless borers or other insects prized for peculiar qualities, such as whose burrows in the wood have been ash, basswood, cypress, red cedar, hol-Their principal item of food is reached by their powerful beaks. The ly, buckeye, and dogwood, and that largely cultivated and this bird is About 15 per cent of their diet conabundant it exhibits a strong liking sists of cambium and the inner bark

HE California woodpeck- | made up of grain, fruit and mast. | the tree may only be lowered, or er is distributed Among the animal food a few word | branches here and there may be throughout most of the borers were found, and caterpillars killed. When the injury is more exoak-covered mountain averaged 2.88 per cent of the diet. tensive, as it often is, the tree may and foothill region of Corn was the only grain found. Poison be completely girdled, and of course California, northern ivy seeds form a large part of the dies. Holes made by sapsuckers go Lower California and diet and are eaten in every month clear through the bark and often in o the wood. Sapsucker picking distiglives generally wherever large oaks This bird shows a decided taste for ures ornamental trees, giving rise to are abundant, and from these it gets fruit and may do injury, as it has in pitch streams, gummy exeresences, and deformities of the trunks. Small fruit trees, especially apple, are often killed, and whole orchards have been destroyed by these birds. Sapsuckers are known to attack no fewer than 258 kinds of trees, shrubs, and vines in the United States, 63 of which are often seriously injured and 32 have

Hickory trees are favorites of the sapsucker, and it is estimated that the annual loss on hickory alone from this cause is about \$600,000. It has been found that sapsucker work unfits for use such important ornamental woods as mahogany, black walnut,



white oak, yellow poplar, chestnut, cherry, sweet gum and hard maple; that it seriously blemishes woods wood even for heavy construction, as ern hemlock. It is evident that sapsuckers do not deserve protection.

The yellow-bellied sapsucker is the only woodpecker having the front of found necessary to shoot the birds The parts of the tree injured by the head—from bill to crown—red in whenever they entered the orchard in sapsuckers are those that carry the combination with a black patch on rich sap which nourishes the growing the breast. The red-breasted sap-The foregoing shows that the food wood and bark. It is evident, there- sucker is the only woodpecker that

"The dynamo, switchboard and bat-

"A ten-ampere battery will operate

machine, fan or electric iron can be

"The farmer, after determining the

number and sizes of lights he desires

in each room, must estimate the num-

ber of hours they will burn in the

morning and evening. These figures

can be obtained from the number of

hours that artificial light is used now.

"The average house with seven

rooms, cellars and closets, should burn

less than three hundred watts a week.

The storage battery of a ten-ampere

outfit will produce three hundred

watts without recharging. It takes

eight hours to charge the battery after

"The cost of wiring the house will

vary between forty and one hundred

dollars, depending upon the amount

and grade of wiring and the fixtures

used. A house can be wired cheaper

when it is being built than at any

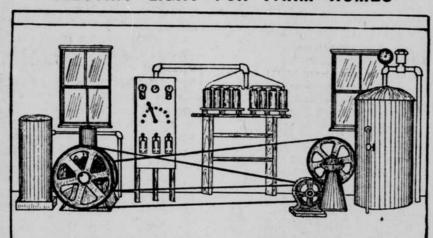
other time. The cost of upkeep is

At the Soda Counter.

One of the recent inventions is a

it has ben discharged. completely.

ELECTRIC LIGHT FOR FARM HOMES



A Small Electric Plant Suitable for a Farm.

More farmers should investigate | no more time. the possibilities of having their own electric plants for furnishing light and tery are shipped ready to set up. In power. According to L. T. Perrill of most cases, a good electrician should Kansas, farmers will shortly be as be secured to install the dynamo and much interested in lighting plants as cells and do the wiring. they are now in automobiles. This is demonstrated by the fact that at a reall the lights required for a seven or cent state farmers' institute in Kaneight-room house, as well as lights for sas more than 400 farmers inspected the outbuildings. In addition, a small an electric plant and were much invacuum cleaner, electric toaster, terested in its operation. wringer, washing machine, sewing

Mr. Perrill continues: "The common rural lighting outfit offered for sale includes a dynamo to generate the electricity, a gasoline engine to run the dynamo, a switchboard, and a storage battery to store electrical energy to be used by the lamps and small motors without running the engine. A good, complete system can be purchased and installed for less than \$500, not much more than one of the dangerous gas plants costs. This can be lowered if the farmer has a gasoline engine or wires his house himself. Electric lights will lower the insurance rate.

"A one-horsepower engine, or an additional horsepower to any engine, will run a dynamo large enough for a ten-ampere outfit. A ten-ampere outfit is satisfactory for the average farm. When the large power is to be supplied by the gasoline engine, the dynamo can be run at the same time, while the latter may be considered ar requiring a little more gasoline, but

Spain devotes 3,500,000 acres to

Trieste is the center of the meer schaum pipe industry.

American mills yearly 5,000,000 bales of cotton.

There are 51,490 passenger cars on the railroads of this country.

A deed to 978,055 acres of land was

recently filed in Dalhart, Tex. Good-by is an abbreviation of an old English form of parting, "God be with you until we meet."

Villain once meant the serf who belonged to the farm and was bought, sold or exchanged with it. A factory in Europe that uses ordi-

nary tar as a basis is turning out about 200 tons of artificial rubber a day. The River Bug is not one of the largest as Russian rivers go, but it is much bigger than we can show, for this tributary of the Dnieper runs to 340 miles, against the 250 miles of the Thames.

as long as the Bug.

New Zealand breeds between 23,000. 000 and 24,000,000 sheep, of which about 25 per cent are annually exported.

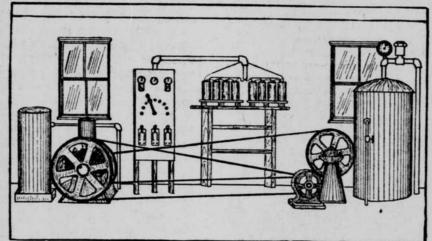
Dust is everywhere, but the worst kind of dust is that which is confined within the four walls of a room. The dust is always germ-laden, because it is infested with effete matter thrown off by human bodies.

The largest sponge ever found came from the Mediterranean. It was three feet across and ten feet in circumfer

of New Mexico and Arizona may prove an excellent source of material for

Belgrade, the Serbian capital, has known many changes of masters, and more than once has fallen into the

hands of Austria. An expedition of Norwegian scien-



TAKEN FROM EXCHANGES

Juniper from the Indian reservations

tists is studying the native flora and The Vistula is rather more than twice fauna of almost unknown regions of northern and central Asia.

mechanical tumbler washer which meets a long-felt want at the soda

receptacle.

water fountain, where patrons have grown tired of seeing the just-used tumbler swished around in a tank of dirty water under the counter, and then offered anew. The mechanical washer consists of a receptacle which contains a rose-jet for cleaning the inside of the tumbler, while the outside is cleaned by water issuing from perforations in the outer wall of the

Wisdom of Experience. "What man has done man can do," remarked the party with the question

"Yes," rejoined the benedict, with an open-faced sigh, "but it is never half as much as his wife expects him to do."

Impatient Conjecture. "Why do you call this train 'the lim-

"I suppose it refers to the number of seats available when travel is

YEAR AGO THIS WEEK HELPED BY BURGLAR I Recommend Peruna To THE EUROPEAN WAR A

Nov. 15, 1914.

Germans gained in the Argonne region, and prepared defensive lines from the North sea to the

Germans withdrew from Kalisz and Weljun and were repulsed near

Czenstochowo. Russians reached Angerburg. Turks occupied Kotur, Persia. British troops landed in Basra

province. Indian troops occupied Turba. Arabia.

Nov. 16, 1914. Fighting in West checked by

snow and floods. Russians checked in East Prussia and driven back near Solday and in Russian Poland.

Cracow besieged. Russians defeated by Turks near Koprukeui. British took Turkish camp at

Nov. 17, 1914. Allies gained ground on Yser between Armentieres and Arras. Germans resumed bombardment

of Reims. Great battle in Poland between Vistula and Warthe rivers. Germans fell back on line be-

ween Gumbinnen and Angerburg. Austrians reached the Kolubara river and captured 8,000 Serbians. Turks checked Russians near Fao and occupied Duzkuey.

German squadron bombarded Li-Russian Black sea fleet attacked Trebizond. All aliens expelled from Frank-

fort.

Nov. 18, 1914. French took forest near Bix-

schoote. Germans mined and blew up part of Chauvoncourt. Germans won near Cirey and In

the Argonne. Russian advance guard between the Vistula and Warthe driven

Battle fought at Soldau. Russians advanced in East Prus-

fight near Trebinje forts. Cardinal Mercier appealed to America to help Belgians.

Nov. 19, 1914. French retook Tracy-le-Val but vere repulsed in the Argonne. British bombarded Dixmude.

Russians were driven back be hind the Bzura river, but advanced in East Prussia and Galicia. Russians defeated Kurds in Per sian Armenia.

French cruiser Waldeck-Rousseau sank Austrian submarine. Names of Germans struck from rolls of Legion of Honor.

Nov. 20, 1914.

French abandoned Chauvoncourt British gained at Bixschoote. French wrecked German earth works and supply train near Reims. Russians checked Von Hinden-

won success near Lodz. Russians took four towns in Ga licia and in East Prussia reached the Mazurian lakes.

burg on Vistula-Warthe line and

British house of commons voted additional army of 1,000,000 men.

Nov. 21, 1914. French captured heights Ornes and advanced in the Ar-

Russians took Przemysl trenches Turkish cruiser Goeben badly damaged in Black sea. French artillery stopped German

attacks in Woevre district. Heavy fighting in Poland and at Serbians fell back before Austri-

Allied aeroplanes bombarded Zeppelin sheds at Friedrichshafen.

Draft Riots.

The only notorious "draft riots" of the Civil war took place July 13, 14, 15 and 16, 1863, in New York city. It is estimated that more than a thousand men were killed, and property worth \$1,500,000 was destroyed in the four days. The draft was resumed, however, on August 19, and was completed in ten days without resistance. There were slight disturbances in Boston on the night of July 15, in Portsmouth, N. H., and in Holmes county, Ohio. In Philadelphia and Chicago prominent Unionists asked the president to postpone the draft, and it was avoided in Illinois until the next year.

Baseball 4,000 Years Old. It is now believed that Egypt is the birthplace of the original ball game. How it was played history does not record Recent excavations made near Cairo have brought to light a number of small balls, some of leather and others of wood, dating back to at least 2000 B. C. These are the oldest balls of this sort known.

Path to Woman's Love. Of all the paths leading to a woman's love, pity's the straightest .-Beaumont and Fletcher.

Marvelously Fine Scale. Millions of dollars' worth of precious metals will be weighed on the ine scales of the New Orleans mint. There are two sets of scales now in use there, the larger of which weighs anything from one-thousandth of an ounce to 600 pounds. The second scale, with its agate bearings, will weigh accurately a human hair.

Optimistic Thought. That which is great is not always autable, but whatever is laudable me great.

Allies drove the Germans across | Family's Sense of Gratitude Fully Justified.

> Whim of Predatory Individual Brought Fortune to Members of Household Which He Had Visited With Intent to Rob.

"A house in the country that I had got into by a convenient cellar window, and that I came out of by the front door," said the retired burglar, "had proved to be very disappointing.

"I had imagined from the nicely kept lawn and the general appearance of things outside that it must be the home of people of means; but in the whole of upstairs I had not found, of things that I could carry away, enough to pay me for my night's work.

"Then, as I came down from the second story into the front hall I to the center in the afternoon; and cast my light around there, to see if mailed; then it would never have The Army of there was anything there worth while. reached him; for on the afternoon of There wasn't, but on a little tray on that very day our uncle moved from Constipation a table in the hall I saw three letters | the old town in which he had lived | Is Growing Smaller Every Day. addressed and stamped ready for mail- so long, and left no address behing CARTER'S LITTLE ing, and I thought I would take these letters and mail them.

then I did a downright foolish thing, something that I had never done be in the town to which he had moved fore and that I never did again-I wrote a note and left it on the little town and had left us \$200,000. tray from which I took the letters:

"'I have taken the letters. I am going right past the post office and I to a hospital that had caught his fancy can mail them just as well as not. and \$5,000 to us, his relatives, "if still "'JIMMY.'

then I never thought of them again till about a year and a half afterward when I saw this advertisement in a

'S. S. O.' "Now that was something of a jolt, tune. wasn't it? Of course that foolish note that I left was a clue and now they but now we have more things than

should I do about it? Should I communicate? "All I could do was to trust my in the bank at the center; but if you hunch, and I trusted it. I wrote, giv- will come over and see us again and ing a fictitious name, and giving my will let us know when you are comaddress as the post office. Of course ing, we will leave around the house it would have been the easiest thing enough to make this visit profitable; in the world for them to have a man | we feel that we are still much in watching the office here for me when debt to you.' I called for the letter, but I liked the house and I thought I should like

"In two days I got the letter, and really coming to me." when I opened it there dropped out of it a thousand-dollar bill. Do you fully grasp that? A thousand-dollar

me: "One of those letters that you mailed for us was to an uncle who hand. lived in a town not a hundred miles from ours. I don't know whether you comes to me today is of that day when wife's and all the children's clothes noticed the address on the letter or it was so scorching hot that they had piled on top of it." not. A nice old man he was, not an to close the school." eccentric nor a hermit, but just an old bach, who lived by himself and went his own ways. He did not seek friends, and so far as we knew we were his only living relatives; but though he lived so near we had not seen him nor heard from him in ?

dozen years. "Then one day, the day before the night that you called, it struck us that we would write Uncle William; and just out of a feeling of friendliness and good cheer we sat down that day and wrote him that let-

ter; the letter that you mailed. 'And what difference did it make, I hear you saying, who mailed the letter? Well, I will tell you.

"'In the ordinary course of things that letter would not have been mailed by us until some of us went down

Not Think I

Ever Felt Much

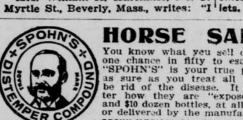
Better



Of Catarrh have taken four bottles of Peruna, and I can say that it has done me a great deal of good for catarrh of the head and throat. I recommend Peruna to all sufferers with catarrh. I do not think I ever felt much better. I am really surprised at the work praise can be said for Peruna."

All Sufferers

Those who object to liquid medi-Mrs. William H. Hinchliffe, No. 20 cines can now procure Peruna Tab-



HORSE SALE DISTEMPER You know what you sell or buy through the sales has about one chance in fifty to escape SALE STABLE DISTEMPER. "SPOHN'S" is your true protection, your only safeguard, for as sure as you treat all your horses with it, you will soon be rid of the disease. It acts as a sure preventive no matter how they are "exposed." 50 cents and \$1 a bottle; \$5 and \$10 dozen bottles, at all good druggists, horse goods houses, or delivered by the manufacturers.

him. But mailed when it was, by LIVER PILLS are you, it did reach htm. He never an-"That was just a foolish whim; but swered it himself; but a year later not only give relief we received a letter from a lawyer saying that our uncle had died in that

"'He had accumulated \$205,000. He had made a will giving \$200,000 of this living." But later, clearly after re-"Well, I did mail those letters, and ceiving our letter, which he would never have got but for you, he had changed his will, giving \$5,000 to the hospital and \$200,000 to us; and now, after some six months of legal formali-"'Jimmy: Thanks for mailing those | ties we have got the money. letters. We want to communicate with

"'So you see your mailing that let you. White to us where you found ter made all the difference in the world to us; it brought us a for-

"'We still live in the same house, were following me up, and what when you were here. In fact, we have some things now that usually we do not keep in the house, but in a box

"But I never went back. Whatevor they got out of it I felt as if, just for the people that lived in it, and I took | carrying the letter to the post office, a thousand dollars was all that was

Oh. Memory! "What beautiful thought comes to bill; and this is what they wrote mind, boys, on this bright, crisp morning?" asked the teacher.

"I know," said Jack, shooting up his "The beautifullest thought that

A Fit Companion.

Lunatic (looking over asylum wali)

-What are you so pleased about? Crank-I've thought of a way to end I time picking out socks and neckties. Lunatic-Oh, what's the idea? Crank-Sue for peace.

Lunatic - Come inside. - Passing

A girl, after she is engaged, can see but one man. But, thank goodness, a man's eyesight is good as long as he

And sometimes love's young dream dies of old age.

Talk is cheap when one uses his neighbor's telephone.

SPOHN MEDICAL CO., Chemists and Bacteriologists, GOSHEN., IND. U. S. A

nentlycure Con-stipation. Mil-

Indigestion, Sick Headache, Sallow Skin. SMALL PILL, SMALL DOSE, SMALL PRICE. Genuine must bear Signature

"Our romance began in a most romantic way. My wife saved me from drowning. She's a magnificent swimmer, you know."

"But you never go out beyond your depth." "No, not any more. I don't know if she would save me again."-Louisville

"The cook is leaving tomorrow,

"What's the matter? Don't we pay "She says it's very strange that every time she has an afternoon off

She thinks we do it on purpose." Underwear for Father.

to find it mornings when its got my

"Heavens, no! It takes all that boy's

count?" "I would if I could afford it."-Bos ton Transcript.

In the hands of a woman the powder

Many a good man who condemns a

Curative Value In Food?

"Recalling that 90% of disease results from errors in diet, then foods properly prescribed by the physician can justly be said to have curative value." -Dr. Henry B. Hollen, in The Medical Standard.

One of the errors in the diet of many people is the use of foods robbed of the vital mineral salts (phosphate of potash, etc.) which are absolutely necessary for proper balance of body, brain and nerves. The result is a long list of ills, including nervous prostration, kidney trouble, constipation, rickets in children, and so on.

Twenty years ago a whole wheat and barley food, containing all the nutriment of the grain, including the priceless mineral elements, was devised especially to correct errors in diet. That food is

Grape-Nuts

Another physician says:

"Nearly half the year my breakfast consists of a dish of Grape-Nuts, one or two eggs, or fruit. I RECOM-MEND IT TO MY PATIENTS CONSTANTLY, and invariably with good results."

This wholesome food not only builds sturdy health and strength, but fortifies the system against disease. Ready-to-eat, nourishing, economical, delicious-

"There's a Reason" for Grape-Nuts



Our booklet, telling you how to keep

well, free to all.

them for Biliousness,

W. N. U., OMAHA, NO. 46-1915.

Courier-Journal.

her enough?" our automobile is in the repair shop.

"No, that ain't loud enough. I want the loudest underwear ever made!" "What for, no one ever sees it." "I want it so loud that I'll be able

"Has your son picked out a career for himself yet?"

It Takes Money. "Why don't you open a bank ac-

If it wasn't for the weather a great many loafers would have no excuse for remaining in the business.

rag is mightier than the sword. sinner secretly envies him.