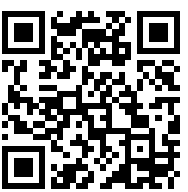

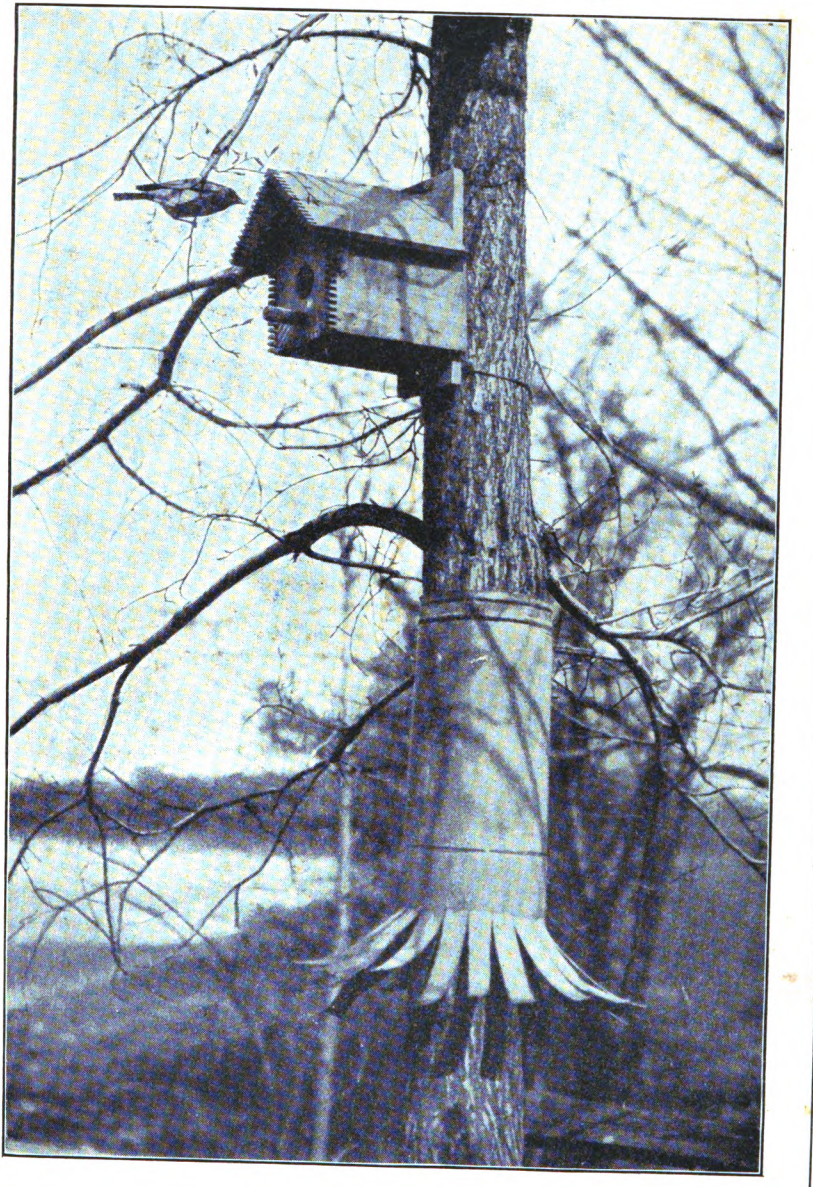

STRINGS AND COTTON AND CHICKEN FEATHERS FOR THE BIRDS' NESTINGS (*See page 56*)

HOW TO HAVE BIRD NEIGHBORS

BY

S. LOUISE PATTESON

AUTHOR OF "PUSSY MEOW, THE AUTOBIOGRAPHY OF A CAT" AND "KITTY-KAT KIMMIE, A CAT'S TALE"

PHOTOGRAPHS BY THE AUTHOR

COVER BY HELEN BABBITT AND ETHEL BLOSSOM

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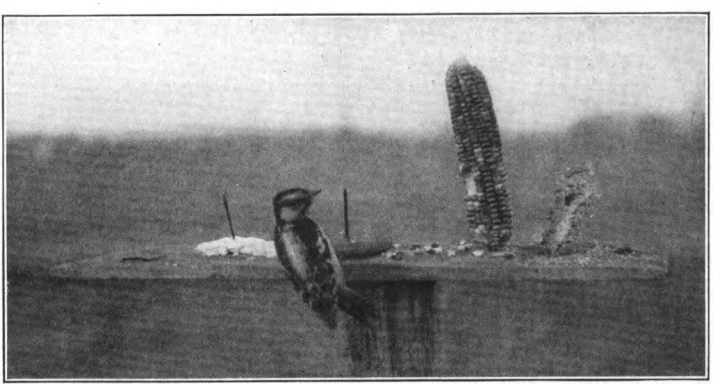
FOREWORD

THIS narrative of neighborship with birds is suggestive rather than exhaustive. It aims not so much to inform the reader, as to instill in him the desire to learn from the outdoors itself, to know *at first hand* about the charms and the benefactions of birdlife. The observing reader will supply what has been left unsaid, and so experience the zest of initiative, the joy of discovery, in our mysterious and manifold bird-world.

S. L. P.

WALDHEIM,
EAST CLEVELAND, OHIO,
October, 1917.



SUET AND DOUGHNUTS FOR DOWNY, CORN FOR THE CARDINAL, CEREAL FOR THE SONG SPARROW

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GOLDFINCH FEEDING BABIES

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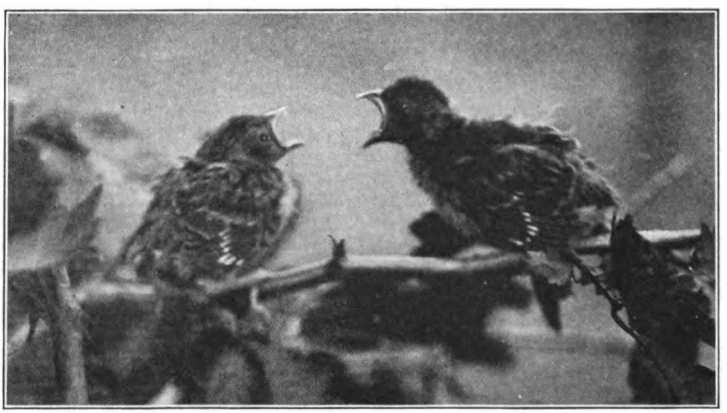
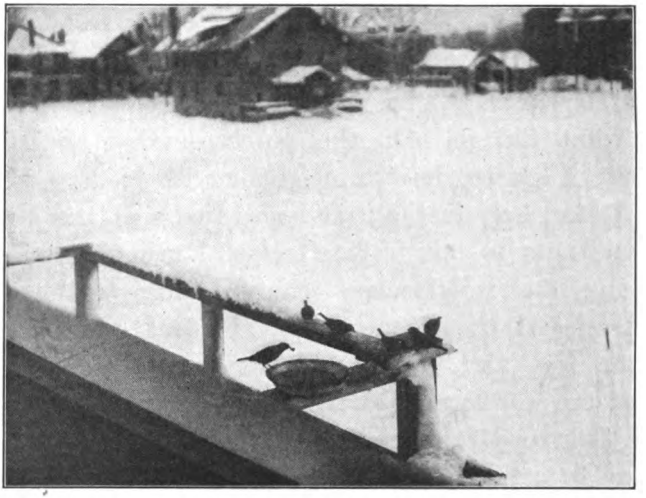


"OH, WHERE IS MOTHER?"

HOW TO HAVE BIRD NEIGHBORS



HOW TO HAVE BIRD NEIGHBORS

I

MY FIRST BIRD NEIGHBORS

THE birds that live in my yard are the loveliest of all my neighbors. During the springtime and summer they awaken me every morning with their sweet songs. Then all the day long their pretty ways make me wish I had nothing to do but to watch them.

Now I can imagine someone saying, "If I had a yard, I, too, would try to have bird neighbors." Listen! Before I had a yard I had bird neighbors on my porch.

How did I get them?

In summer, a basin of water on the porch railing, and in winter, the basin filled with table scraps—this is what did it. On the porch of that apartment house I learned how to neighbor with birds.

A kind lady in the next house tied suet and strings of peanuts to one of her trees. During winter and spring the woodpeckers enjoyed the treat, while we enjoyed the woodpeckers! Pigeons and bluejays came too, and, yes, English sparrows, those birds that are nowhere welcome. But they didn't have it all their own way there, as they do where nothing is done to attract other birds.

One winter day a beautiful blue and white pigeon with rose-colored neck came in at an open window. The streets were covered with snow. It was hard for birds to find anything to eat. This pigeon ate some rolled oats that I scattered before it, drank some water, and walked into a corner. After a nap it ate some more; then took another nap. When it awoke again I set it in a waste-paper basket by the open window, so it could go away when it pleased. It took several more helpings of oats. Toward evening it flew away.

Among the pigeons that used to come often to my porch was my little guest of a day. As the pigeons ate they always cooed. Perhaps they were remarking how good it tasted.

In early spring the robins came. They liked little

scraps of meat. Chopped raw beef was to them the greatest treat. At the basin they not only drank, but spread their wings over it and splashed the water all around, trying to bathe in that shallow dish. It was only a big flower-pot saucer. While the weather was still cold, they began to sing mornings before daylight. It was like listening to Christmas carols to hear them.

On mild and thawing days they could be seen hopping over my neighbor's lawn. Most cunningly they would turn their heads to one side, then to the other. It is said that they do this so they can hear the worms and insects move about in the ground. I believe it; for often I have seen a robin, after listening intently at some spot, stop to scratch and dig, then pull out a worm.

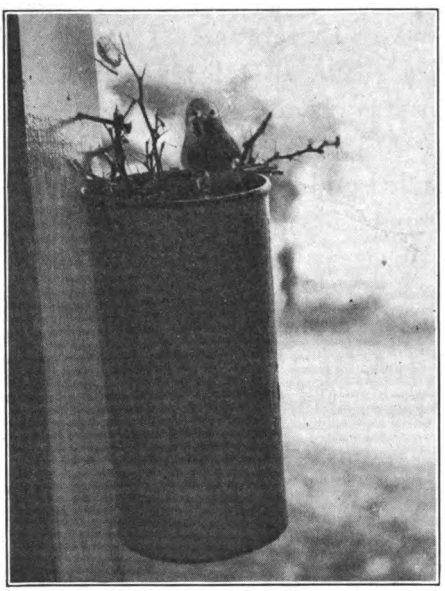
The robins often pulled and jerked at the morning-glory vines on our porch. Whenever they got one loose they would gather it up in loops with the bill and carry it away. They also tore strings off our mop and flew away with them.

On a pillar of our porch there hung a can in which we sometimes put flowers. One rainy April day a little wren alighted on the edge of that can and looked in. The can was empty at the time, so the bird went inside, but came out again quickly and flew away.

Pretty soon two wrens came, and both went inside. Then for several days they made frequent visits to

that can, and there was almost constant trilling of the merriest bubbling songs. Sometimes there was just a chatter back and forth, as if they were talking or arguing. These wrens were so much together that I concluded they were mates.

They fetched little twigs of all kinds and dropped them into that can. They also fetched bits of cloth and chicken feathers, as if they actually intended to make a feather bed. Mr. Wren could carry things in his bill and sing at the same time. Once in a while, when he brought something, Mrs. Wren chattered louder than usual. It sounded as though she wasn't pleased with what he had brought. Sometimes she wouldn't even let him in, and, after carrying his burden around for a while, he would drop it. But he sang on just as happily, and entertained her while she did most of the work. This went on for several days. At last they fetched



THEY WERE MAKING THAT CAN INTO A BIRD HOME

grasses, too. It was a joy to see how happy they were at their work. They were making that can into a bird home.

When the little home was finished, Mrs. Wren loved it so well that for about two weeks she stayed in it nearly all the time. Mr. Wren brought her many kinds of bugs and worms to eat, and sang to her all the day long.

Soon there were some baby wrens in that little home. Again Father and Mother Wren worked hard from daylight until dark, fetching worms and bugs for their babies to eat. Whenever one came home with a bill full, he glided right in among those thorny twigs. How they could do it without getting pricked was a wonder!

One day all this was changed. Instead of going into their little home with provisions, both Father and Mother Wren stayed out on the edge, and held a worm or a bug where the little ones could see it. After a while, one of the baby birds came up a little way to receive a helping of the food. But the big outdoors must have frightened him; for he ducked right down again. The next one that came out had more courage, or else he was more hungry. He received a helping; then gazed about him a little. Evidently the world looked pleasant to him. He shook his feathers, flapped his wings, and didn't go back into the little home at all. This was just what Father and Mother wanted him to do, and each gave him a

whole worm, although the birdies inside were calling for some too.

The day was fine. It was still early. The babies would have all day in which to get used to the outdoors if they would come out now. To-morrow it might rain, and the next day, and the next. The babies were quite old enough to live outside of that stuffy can. They must come out to-day, — so Father and Mother Wren had decided.

After the little venturer had received several helpings, another birdling came scrambling up. He got all of the next helping. Mother Wren was among the porch vines, chirping. Every little while she flew to the little ones, fluttered her wings before them, and then flew back to the vines. In this way she was coaxing them to follow her.

Before Number Three came out, the mother had Numbers One and Two safely among the vines. Number Four came close behind Number Three. It wasn't very pleasant to stay down in the can all alone. The mother kept up her coaxing until she managed to get them all in nice, shady places.

It was now about nine o'clock. The rest of the day was spent quietly among the vines. After they had rested a little from the excitement of their first flight, Mother tried to keep them moving from vine to vine. One was more clever than the others. He learned everything quickly.

The Wren family lived in the vines all the next

day. On the third day Mother Wren began to coax them farther away. Back and forth she flew between the porch and my neighbor's tree, and around in circles, to show the babies how to do it. Father Wren coaxed them on with a white worm in his bill. He was not singing much now, because these growing birds needed more and more food. Also, father-wisdom bade him keep quiet lest his babies be discovered and come to harm.

The cleverest of the four was also the biggest; so it was easy to tell him from the rest. Again, he was always the first to venture. But as he neared the tree, when he had almost reached his goal, he began to drop; and he fell to the ground. Fearing some harm might come to him, I went down quickly with the long-handled dust mop. It was fuzzy, and soft for him to rest on. With it I hoisted him to a low branch. Mother and Father Wren scolded, but went to the young bird as soon as my back was turned. Birds do not like to have people meddle with their affairs; but sometimes when they are in trouble we can help them.

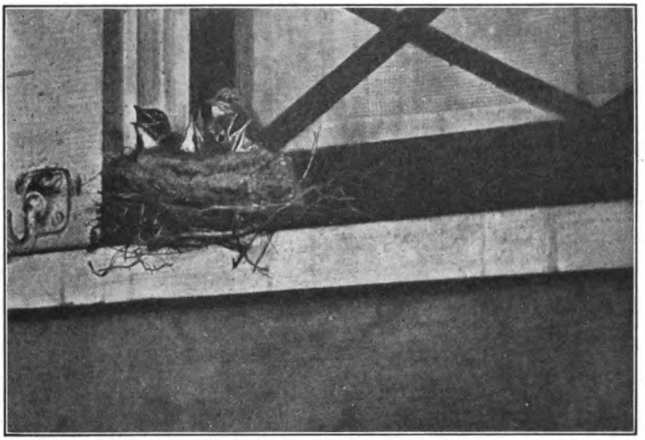
Maybe this little mishap showed Mother Wren that her babies were not yet strong enough to fly so far. Anyway, she waited until the next day before she urged the others to go. Even then she was not quite decided. At dinner time the three were still on the porch. They had reached the highest rung of the trellis. In the afternoon, when I returned from

school, they were gone. Father Wren was again singing his cheery songs. He had kept pretty quiet while the little ones were learning to fly. Why? Because he did not want anyone to find out where they were.

My robins, meanwhile, had made themselves a nest on a high window sill at the far end of the porch; but not until the wrens began nesting did I discover it. Already there were three blue eggs in it. The robins seemed so distressed at being found out that we kept away from that end of the porch until they got well used to us. The wrens didn't fear us at all. They came to their nest no matter how many people were on the porch.

I had now learned what the wrens and the robins like for their nestings; so I fastened strings, shreds of cloth, some cotton, and small chicken feathers to the low branches of my neighbor's trees, and also on my porch. I had read somewhere that some birds will pull feathers out of their own bodies, if they can find none elsewhere, with which to line their nests. After the wrens had cleaned out the can, they helped themselves to cotton and feathers, and made ready for their second nesting.

Father and Mother Robin were such devoted parents, it seemed as if they couldn't do enough. Their babies always craned their necks and opened their bills wide as soon as they heard anyone near. As they grew older they also chattered and flapped



THE BABY ROBINS

their wings. Sometimes they fluttered over the sides of the nest so far that I feared they would fall off the high window sill.

One morning the robins' nest was empty, and the young were over on my neighbor's lawn. For convenience I will call this neighbor Mrs. Daily. She lived on our right. The neighbor to our left was Mrs. Cotton.

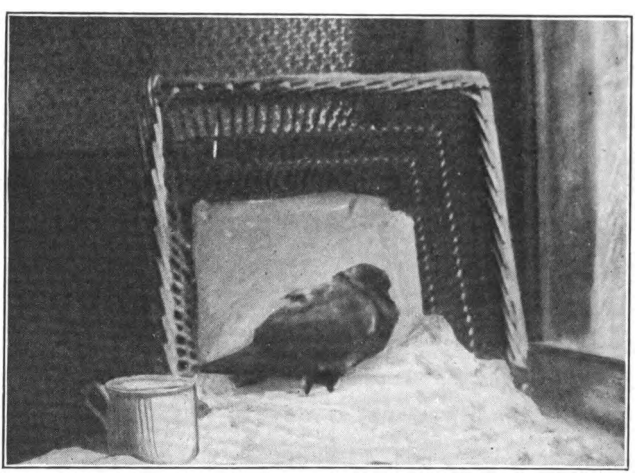
A birds' bath at Mrs. Daily's and the tree with nesting materials on it showed the birds that they were welcome there. So the parents coaxed their young in that direction.

Mrs. Cotton also tried to attract birds. But her basin sometimes went dry for days. Also, she had a big, beautiful cat that was usually somewhere in the

yard. It was not so inviting there, according to birds' ways of thinking, nor so safe for their young, as over at Mrs. Daily's, where the cat was kept in.

I kept our kitty locked up night and day, and asked my neighbors to keep their cats in, too, until these young robins could fly up into trees. At first they could only fly sideways. It is more than just a kind act to save young robins from harm: it is saving birds who will be useful and pleasing all their lives, and who will spread happiness wherever they go.

When I saw how my birds left me as soon as their young could fly, I began to wish that I, too, had a yard and trees, like my neighbors. I longed to have more birds, and birds of different kinds.



ONE WINTER DAY A PIGEON CAME IN AT AN OPEN WINDOW

VACANT LOTS
ATTRACT BIRDS

II

NEW ADVENTURES IN BIRDLAND

I GOT my wish: Our present home is a whole house, with a yard. We have big trees and little ones, and on one side there is a grape arbor. All around us are vacant lots, where thornapple bushes, dogwood trees, and tall sunflowers grow. These attract birds. Behind the vacant lots there is a ravine with wild cherry trees, elder bushes, wild grape tangles, and other attractions for birds.

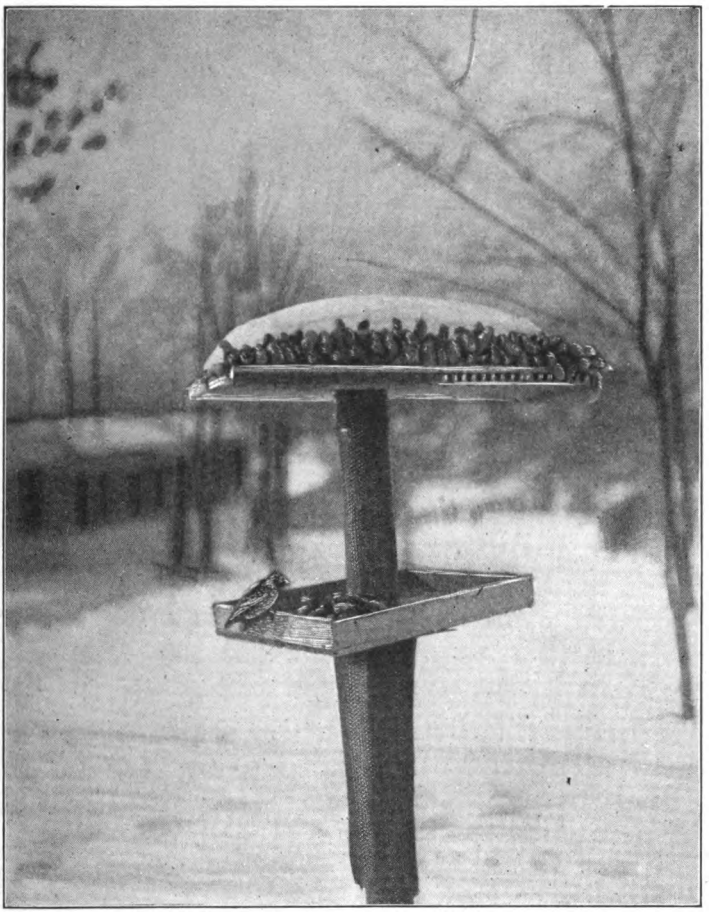
The wrens and the robins had gone to their winter homes when we moved, and the woodpeckers had come. I had bought a bird guide with colored pictures, and a pair of field glasses which brought those black and white birds very near to me. Some had red on the back of the head. They were the

downy woodpeckers. A bird very much like the downy, but larger, was the hairy woodpecker. And there were birds just like the downy and hairy but without the red patch on the head. They were the mates of the downy and the hairy.

Whenever I heard a brisk "chsip," I could see downy approach in graceful, curving flight toward some tree. Usually he perched near the bottom and climbed up, pecking and scratching as he went. Sometimes he alighted higher up and came down cat-fashion, but always busily pecking at the bark. The hairy did the same. This must be why these birds are called woodpeckers.

Knowing how well the winter birds like peanuts and suet, I fastened strings of peanuts across a bird table that I had made, and in the tray below I kept suet. I also scattered chickfeed on the ground beside a tree, and added to it buckwheat and sunflower seeds. But I soon learned better than to put anything for birds near a tree behind which a cat could hide!

It was great fun to watch the different birds select their favorite food. The woodpeckers liked the suet so well that, while it was on hand, they hardly ever touched the peanuts. Downy also liked the chickfeed; but he did not like to step down to the ground. In trying to get it, he would back down the tree until his tail touched the ground. Then, without leaving the tree and while propped on his tail, he reached



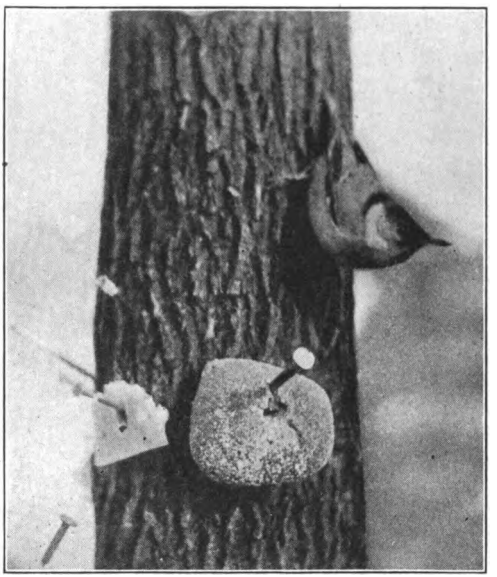
THE WINTER BIRDS LIKE PEANUTS AND SUET

over to the right or left and picked up kernels. In this way he could eat without stepping on the ground.

And downy had good eating manners. He never

hurried, never fidgeted. Sometimes he stayed twenty minutes at a meal and ate slowly and quietly, like a well-bred person.

Another bird that came to my place in winter had a light blue back and a white front. His wings and



WHEN I DID NOT HAVE PEANUTS I GAVE THE NUTHATCH DOUGHNUTS

tail were dark blue, and so was the top of his head. I always knew he was near when I heard a sound like "gack" or "yack." He liked the peanuts better than anything else. With his sharp bill he would punch a nut, then hold down the shell while

he pulled out the kernel. Maybe this is why he is called the nuthatch. Sometimes, when I did not have peanuts, I gave him doughnuts. He liked them just as well. He would nibble at a doughnut until it dropped from the nail, then go to the ground and forage there. He liked cheese also.

I soon found that somebody else, too, liked suet and peanuts. This was the red squirrel, and when he was on the table the birds would not come near. However, it was birds I wanted and not squirrels, — especially not the red squirrel, who is said to bother birds in many ways. To keep him away I nailed tin sheeting around the post of the bird table.

I am sorry to say that the nuthatch was not at all polite to other birds. He always wanted all the food himself, no matter how much there was on hand. He would flit from one feeding place to another and chase the other birds away. I stopped putting peanuts on the table, so that he would have no excuse to go there and the birds who liked the suet might eat in peace. I put all the peanuts on the tree farthest back in the vacant lot and made the selfish nuthatch eat there by himself.

Another thing that was not nice about the nuthatch was his way of eating. He was always in a hurry. He would take the kernel out of a nut, walk up the tree with it, and fly away. Then he would come back quickly and do the same thing again, as if afraid another bird might get something.

Sometimes he kept this up for an hour or more. Even after all the peanuts were moved to his tree, he would bluster around at the other feeding places and try to drive those peaceable birds away.

The dearest of all my winter birds were some that came singing in all sorts of weather. I called them my little minstrels.

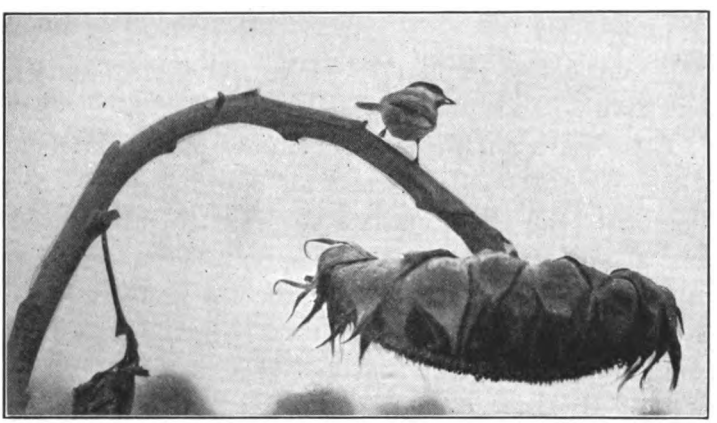
"Chicaday, chicaday, chicaday-day-day-day," was their song. Somebody has named them chickadees, and the name just fits. If you should see a little gray bird with a black cap and bib, who comes singing that song, you may know that you have seen a chickadee.

The chickadees were not at all particular what they ate. They sang just as cheerily when they had only breadcrumbs as they did when they found suet and peanuts and sunflower seeds. They never wasted their food. If any fell to the ground they picked it up. They were the politest of birds and, like the downy and the hairy, they worked at the trees most of the time.

These winter birds are some of nature's best house-cleaners. They work all through the cold and stormy season when the other birds are away in their sunny winter homes. Should we not remember to give them a treat once in a while, and so brighten the cold days with good cheer?

From the very first, I heard many bird voices coming from the ravine. So one morning I took

a walk out that way. Scattered all along were tall sunflowers, now gone to seed. Foraging on some were the noisy bluejays, on others the dear happy chickadees. The trees were bare, so that I could see as well as hear the birds. Woodpeckers were tapping, pecking, delving. All along I heard this pleasing, friendly music, as if the birds were following me. So pleasant was my walk that I did not realize how far I was going until I was at the end of the city, where the country begins.



THE DEAR HAPPY CHICKADEE

A good way off were some widely scattered houses. On a tall pole near the first house was a very large bird house. As I drew nearer, three small bird houses came in sight.

I made up my mind to get acquainted with the

people in that home. A pleasant lady opened the door and invited me in.

"Who put up those bird houses?" I asked, the first thing.

"That's my boy," said the lady. "He just loves to tinker with his tools." She pointed with pride to a clock shelf which she said he had made for her birthday.

"And he made that big bird house, too?" I asked.

"He made every one," answered the lady, "and he is making more. He is learning it in the manual training school."

I told her I wanted to make some bird houses, but didn't know just how to go about it.

Then she led me into a tiny room off the kitchen. There by the window stood an old dry goods box that had been fitted up as a work bench, with a vise and a rack for small tools. Larger tools were hanging on the wall. On some shelves were wooden boxes and boards. On the work bench lay a bird house. I picked it up and looked at it.

"He says that's to be for wrens," explained the lady. From a chest she produced another bird house which she said was for bluebirds.

"He makes them out of these boxes that he gets from our grocer," she added, "and I save the starch boxes for him."

The lady had much to do, so I made ready to go. But she went on talking:

"At first, I couldn't bear to give up this little storeroom. But since I have seen how happy it makes Laddie to have this little 'shop,' as he calls it, I am glad I gave in to him. Would you believe it: from the time he begins to work with these tools until he lays them down again he whistles and sings like a bird himself! I think anything that makes a boy so contented must be good for him."

The lady then went about her work, telling me not to hurry. So I stayed to take some measurements of the bird houses. Both were made so that they could be opened in front.

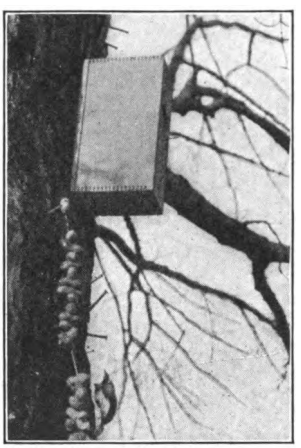
"He makes them that way so they can be easily cleaned," explained the lady.

On the way home I stopped at our grocer's and got some small wooden boxes. Two were yeast foam boxes, and one was a cocoa box. I, too, had learned in manual training school how to use simple tools, so I bought also a saw, plane, shaving knife, brace and set of bits, and a small vise. Then out of an old sewing machine stand I made a work bench, and a light corner of the basement became my "shop." I made those yeast foam boxes into wren houses, and out of the cocoa box I made a bluebird house. The boy's mother had told me that his manual training teacher was a lady, and that she was "just as good as a man," so I felt quite proud of my new fancy work.

The house for bluebirds and one for wrens were put

up in trees. The other wren house was mounted on a post above the grape arbor. But it did not stay there long, for I soon found that a grape arbor is no place for a bird house. Can you guess why not?

It was while waiting for the wrens and the bluebirds to come that I had such delightful times with the woodpeckers, the nuthatches and the chickadees.



THE SELFISH NUTHATCH

CATS BELONG ON THEIR OWN PREMISES

III

REAL TROUBLES IN BIRDLAND

I SAID that birds were lovely neighbors. So are some other animals. At my new home I soon became acquainted with a wild rabbit. Two dogs roamed around in the vacant lots and in the ravine a great deal. Often when I heard them barking, the next thing I saw would be Bunny, running as fast as he could toward our place, with the dogs

after him. Bunny could glide through under the garden fence, and that was lucky for him. The dogs were too big and couldn't.

I was glad when Bunny came to our place for safety. He liked slices of apple so well that he would come nearer and nearer to get them, until finally he ate out of my hand.

One hot day while Bunny was in our yard, he saw the birds' basin, and went there to drink. He had

THE BASIN WAS BUNNY'S LOOKING-GLASS

been accustomed to drink at the brook in the ravine, where the water always runs, if there is any. But the brook was dried up at this time of year. The clear, still water in the basin was a new thing to Bunny. He took a long look at it. Seeing himself pictured in the water was another new thing to him, and he looked again and again. Evidently he thought himself quite handsome, for even after it rained and the brook filled up again, he still kept coming. The basin was his looking-glass.

I am sorry for what I have to tell about some other animals. One day our neighbor's cat lay crouching near the tree under which the chickfeed was scattered. A downy woodpecker was just coming down the tree. Kitty's eyes glared. Her teeth chattered. But evidently the downy did not see her. I scolded Kitty and drove her away. This disturbed the downy, and he flew away too. But that was better than to let him come down where Kitty could jump on him. She could easily have done so while he was reaching over to the ground for a kernel.

After this experience I covered up all the chickfeed beside the tree, and scattered some in more exposed places, away from any trees and from bushes. I also laid suet on low branches of trees and tied it on firmly, and poked some into small holes of old trees, and under the bark.

Soon afterward I saw the same cat again. This time she was on a branch, eating suet. That set

me to thinking: "If the cat can get to the suet in the tree, she will also be able to get to the bird houses. Some day she might find some baby birds in there, not yet able to fly."

I did not take away the suet which the birds liked so well. I got some tin sheeting and tacked it around the tree. The cat could not climb over the smooth sheeting.

Imagine my surprise when I saw her up there at the suet again! "How did she get there?" I wondered to myself. Day after day I watched Kitty before I found her out.

One morning, who should go climbing up that tree but a red squirrel? When he reached the tin, he looked around and made a loud chatter. Seeing no one, he took one big jump over the sheeting and went to the suet. After tasting it, he wiped his mouth on the bark as if he did not like it. Then he went over to the bluebird house. The entrance to this little house had been nicked by somebody with sharp little teeth. Now I found out who that somebody was. This squirrel was even now nibbling at the entrance, trying to make it still bigger. At the wren house somebody had broken off the little porch, which was probably the squirrel's doing also.

I wondered what I should do to keep this squirrel from spoiling my bird houses. Some more tin sheeting, I thought, would fix it so he could not jump over. I put another sheet just above the first one.

That made the tin protection thirty-six inches deep. When the squirrel came the next time, he climbed as far as he could, then looked up at the tin. That was too high a jump. He turned, jumped to the ground, and scampered away.

The pilfering red squirrel is not to be confounded with the genial gray squirrel of our parks, who loves to take peanuts out of our hands.

I still wondered how Kitty had made her way to the suet, with the tin around that tree. Surely she could not jump over the tin! As a jumper the squirrel can beat Kitty any time. One day I heard a scratching noise. Kitty was sharpening her claws on the bark of the next tree. Every little while she climbed a few steps up that tree; then sharpened her claws again. There was nothing in that tree that she could harm, so I let her go on. She walked along on one of the branches, and jumped across to a branch on the other tree, the one that held the bluebird house, and smelled around there. It was early spring. There were no young birds in the house yet; so I let her go on, just to see what she would do. Some English sparrows had started to nest in the little house. Kitty pulled out grasses and feathers, and spoiled the nest.

Now just think how wise she was to plan that all out so nicely! And all she gets for it is scolding! Why should we blame Kitty for liking birds? We like our chicken dinners. We praise Kitty when she

catches a mouse or a rat. Some people even entice her to catch English sparrows. How can she know it is good to clean out a mouse nest and naughty to clean out a bird nest?

Two things can be done to lessen the loss of birds by cats. First, to safeguard in every possible way every bird house, feeding place, and bath. Second, to compel the owners of cats to keep them on their own premises, and to lock them up nights. It is at night, when there is no one to interfere, that cats do the most damage to birds.

I knew that if Kitty could jump from that tree to the next one, the squirrel could do it, too; so I put double tin sheeting on that tree also.

But such a clever cat and such a nimble squirrel would also know how to climb the grape arbor, I thought; so I took the wren house off the arbor. This house also had been nibbled and the entrance made much larger. I concluded that the worst of all places for a bird house is a grape arbor, a pergola, or a garden arch.

A friend had sent me a beautiful wren house. It was shaped like a small barrel, and had four rooms. I called it the apartment house. Fortunately, it was made of such hard wood that no squirrel could bite through. I had this house put on a tin-sheathed post on the north side of the house where it would be in shade.

For the bluebirds I put up two new houses. The

one that had been up all winter was so smelly of squirrels and English sparrows that I knew the dainty bluebirds would not like it. The time was near for the birds to return from their winter homes. I wanted everything clean and safe for them.

THE GENIAL GRAY SQUIRREL

THE RETURN OF THE BLUEBIRD

IV

THE BLUEBIRDS' BUNGALOW

I LOVE the springtime because it brings my birds back from their winter homes.

One cold March day I saw something blue flash across the sky.

"Can that be the bluebird I have been waiting for?" I thought.

It flew into a tree; then alighted on a clothesline post. I could plainly see the blue on its back and the red on its front. Yes, it was the bluebird. His song was as beautiful as his plumage, but in a minor tone:

"De– De–
ary! ary!"

Next he flew to the top of the wren house, tripped along the roof, leaned over and looked at the little porches. Then he went down on one of them and looked into the room. That was as far as he could go. The entrances to these apartments had been made for the tiny wrens and not for bluebirds. When he saw the bluebird house in the tree, he flew to a branch just in front of it and looked at it a while. Then he flew back to the wren house and tried that again; he liked it so well, he couldn't bear to give it up.

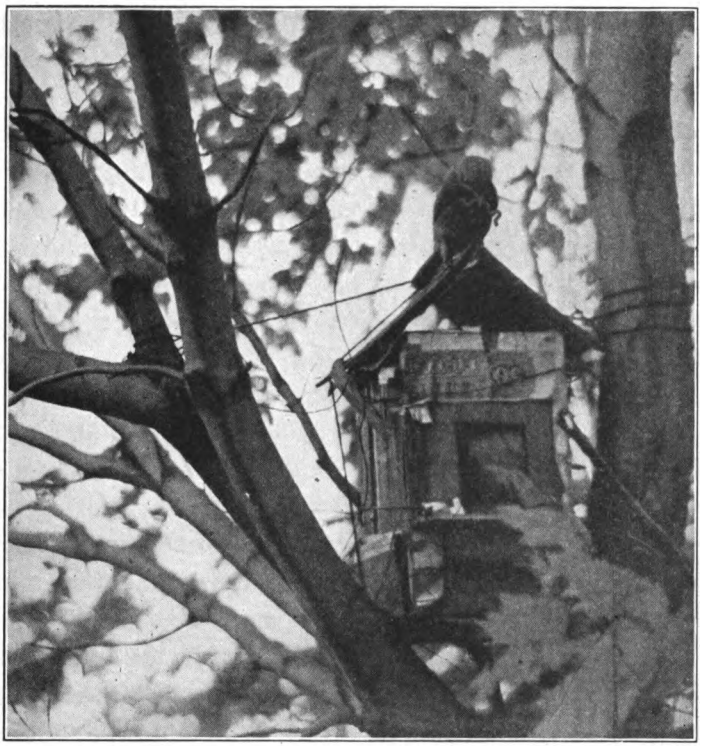
After a week or so another bird came, of much paler hue, but with the reddish breast. The song of my bluebird now became long and pleading: "Deary! dear, dear, deary!" But it still remained subdued and minor. Together he and his newly arrived companion visited the bird houses, so I concluded that they were mates. They could hardly make up their minds which house to take, so pleased were they with all of them. Mrs. Bluebird tried the wren house, too. But when she saw she could not get inside she did not go there any more.

My prettiest bluebird house was on our hammock post, well shaded by our biggest tree. I had read somewhere that bluebirds like to have one house for spring and another for summer. So this house was made with two rooms, one above the other. I thought the bluebirds would surely like this double house better than the single one, for they went inside it many times, and always stayed there long.

The other house, which was mounted on a young maple, was not nearly so pretty. It was made out of cigar boxes and I had forgotten to take off the labels. After the bluebirds had visited it I did not dare touch it because, if their houses are interfered with, birds are liable to go away. Both the maple and the hammock post were well protected with tin sheeting.

One day Mrs. Bluebird fetched some grasses in her bill. To my great joy she alighted on the perch in front of the double house. Twice she poised to fly, but did not. At last she flew — and where do you think she went? Why, to that ugly little house with the labels on it!

While she was in the house, Mr. Bluebird alighted on the porch, looked in, and sang a little song. Mrs. Bluebird flew out past him and almost brushed him off. Then he went inside, and just as Mrs. Bluebird returned with some more grasses he came out with a chip in his bill. Some chips had fallen inside when I made the entrance, and he did not like that. The



SOMETIMES SHE WAS JUST GLIDING THROUGH THE ENTRANCE AS HE ALIGHTED ON THE HOUSETOP WITH A CHOICE MORSEL FOR HER

little house must be clean, since Mrs. Bluebird was going to make her nest in it. Sometimes he brought a grass or two; she brought whole wads of grasses. But he made up in attentions to her. Wherever she might be working, he perched near by, on a fence

post or a low branch, and kept his eyes on her. As she went from place to place to find the right kind of grasses, or to the little house to throw them in, he always followed her. Sometimes she was just gliding through the entrance with a load as he alighted on the house top with a choice morsel for her to eat.

One day our neighbor's cat was hiding behind an evergreen near where Mrs. Bluebird was hunting grasses. Mr. Bluebird's bright eyes saw her just in time.

"Dear-dear-dear!" he cried, quickly and jerkily.

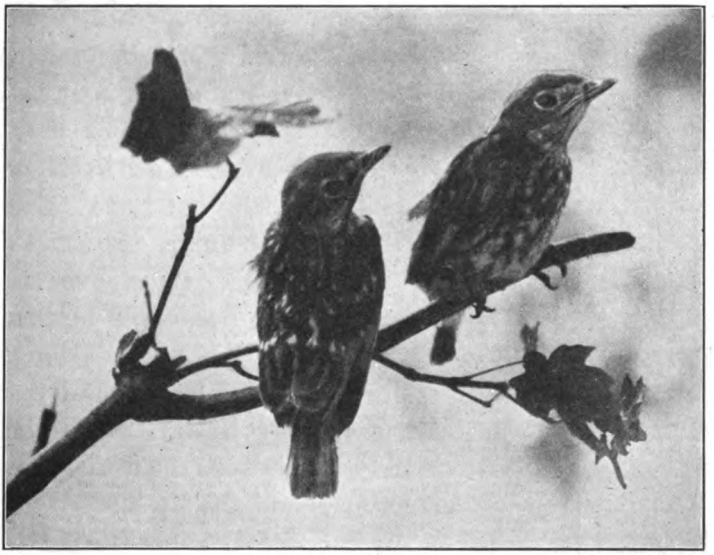
Mrs. Bluebird knew that that meant, "Danger! Fly quick!!" Up she flew, and away.

The cat jumped high and almost caught her.

After that I chased the cat away every time I saw her. There certainly should be a law to make people keep their cats at home.

When Mrs. Bluebird had her house all furnished she stayed at home about two weeks and took a good rest. Mr. Bluebird continued to bring her meals and to entertain her. When he was not hunting bugs and worms, or chasing English sparrows, he was sure to be somewhere near home, singing his sweetest songs.

When Mrs. Bluebird was able to be out again she and Mr. Bluebird were busier than ever. Both were carrying food to the little house. I knew then that they had babies in there, so I called him Father, and her Mother.



BLUEBIRD BABIES TO FEED AND CARE FOR

The bluebirds caught some of their food in the air, but a good deal of it they picked up in my garden. I had some low stakes there expressly for them. They perched on these and on the bean-poles, and from there pounced on many a luckless worm or bug that their sharp eyes espied. I am sure the bluebirds are great helpers in a garden.

After two busy weeks of baby-tending, Father and Mother Bluebird did just what the little wrens had done. They made the babies come outside for their food, or go hungry.

I think the first little bird to leave a nest must be

THE BLUEBIRDS MOVED INTO THE PRETTY DOUBLE HOUSE

very courageous. The others usually follow close after him. It was so with these bluebirds. And as they came out, one after another, Mother coaxed them over to the thornapple bushes. She did it by calling, "Dear dear," and flying back and forth between the little house and the bushes.

Some of the baby bluebirds were quite obedient and flew after the mother. Two liked it so well on a branch in front of their house that they stayed there a while; then flew to other branches in the same tree. Father looked after these, and Mother stayed with the other three. What a chatter they always made when food was brought to them! It seemed

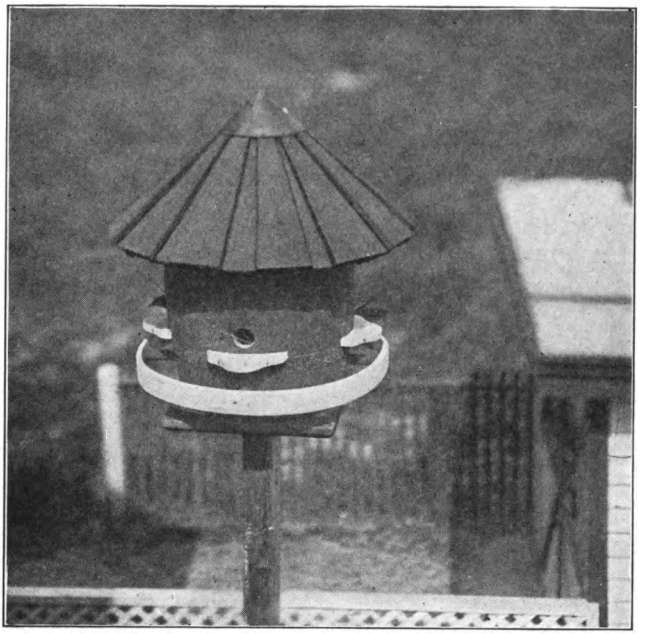
as if each one said: "Come to me! Come to me!"

While Father and Mother Bluebird had those babies to feed and to care for, they started another housekeeping. This time they moved into the pretty double house and took the lower story. In the second coming-out party there were four more little bluebirds.

All through this second housekeeping the English sparrows tried repeatedly to get into the upper story, and Father Bluebird had to spend much time chasing them away. In the one-story house he had that much more time to get food, or to sing.

I did not clean the bungalow house after their first nesting, because I did not want the bluebirds to nest in it again. After the double house was vacated, I cleaned both houses, and found that the bluebirds had used only grasses and a few feathers for their nesting. In each case they had covered the entire floor with grasses, but the cup-like nest was back against the rear wall, as far from the entrance as it could possibly be.

What could this mean but that the bluebird likes a house with depth so she can bed her young as far back from meddling paws as possible? This much I learned from examining the deserted bluebird nests.



RENTED FOR THE SUMMER

V

THE WRENS' APARTMENT HOUSE

A FOUR-ROOM house which had been sent to me was very much liked by a pair of wrens. Again their lively, rippling notes filled the air, as these wrens went from room to room of this "apartment house," as I called it. It was three days before they made up their minds which room they liked best.

Then they brought little twigs and bits of rag, and leaves, and other things, and poked them into one

of the rooms. It was as good as saying, "We will take this apartment for the summer."

Some English sparrows wanted that same room. We always shooed them away, of course, if we could without frightening the other birds. The wrens jabbered and hissed at the sparrows, and stayed, pecking them and being pecked by them. There were four sparrows and only the two wrens; so the poor little wrens finally gave up and went away.

But, try as they would, the sparrows could not get inside of the house. After a while, they, too, went away. Then the wrens returned. It seemed as if they had been watching for the chance.

The wrens soon fetched more twigs, some of them several inches long. They poked them in as far as they would go; then went inside and pulled them in as well as they could. But some of the longest ones remained partly outside and so blocked the entrance to any birds except the tiny wrens.

Again the English sparrows came and, although they couldn't even get their heads in now, still they bothered the wrens. They couldn't have that room themselves, and they didn't want anybody else to have it.

With such a mean spirit is it any wonder that nobody likes these birds? I cannot bear to call them sparrows any more, because so many good birds go by that name, and are therefore in danger of being disliked. Or, I wish that all the good sparrows could

have a different name, and let the English sparrow alone keep the name he has dishonored.

The boy has told me that, to keep English sparrows from increasing around his place, he destroys their eggs wherever he can find them. He said that one pair of sparrows seemed to blame the bluebirds for it, and in revenge destroyed the bluebirds' nest.

We kept up the shooing and handclapping whenever English sparrows visited the wren house. After a while the wrens began to understand that we were trying to help them, and went on with their nesting. They put tiny sticks and twigs into other rooms of their house also, — and now there was a perfect concert of wren music all the time. Before night two more entrances were blocked. Some of the twigs that these wrens brought had such long thorns on them that they would not go inside at all. But this did not discourage the plucky wrens. They just dropped them to the ground and fetched others.

The next day another pair of wrens came. It seemed as if wrens had a way of letting their friends know where some nice apartments could be had. I was so eager to accommodate as many wrens as would come that I had made some one-room houses for them. One was mounted in a pear tree; another under the overhang of the garage roof.

This last wren pair seemed quite bewildered with so many houses to choose from, and all of them different. Whenever Mrs. Wren showed preference for

one house, Mr. Wren would go to another one and with his singing try to coax her there. She was seen oftener about the house under the garage roof, than the others. Mr. Wren seemed to like the apartment house best. He was such a jolly little fellow, it is no wonder he liked to have company. But Mrs. Wren did not care for that at all. A small cottage was her choice. After making us believe that she liked the

THE SMALL WREN HOUSE IN THE PEAR TREE

one under the garage roof, she came with a stick about three inches long and flitted about with it.

Mr. Wren had already put some nesting material into the apartment house. But hard as he tried, by singing and by soft chatter, which I suppose was coaxing, and by frequent visits to the apartment house, he could not win her over. Her mind was made up, and it must be — what? Well, it was the small house in the pear tree. When Mr. Wren saw that he couldn't have his way, why, of course, that small house became his choice too.

Each of these pairs of wrens raised some babies. But with all their work and family cares, and the English sparrows to bother them at times, they were always a happy company. They could sing just as beautifully when carrying twigs or worms or bugs as at any other time. Their happy music made a continuous open-air concert. And their manners, whether at work or at play, were so entertaining that I could not bear to take my eyes off them.

This went on through late April and part of May. One morning the wrens were all excited. Two of their little ones were on the ground. Our kitty had been tethered to a hitching weight; but now, fearing one of the little wrens might fly near her, I locked her up. The parents were coaxing their little birds over toward the vacant lot where the thornapple bushes are. These bushes start even with the ground and are so dense, and have such long, sharp needles,

that a cat would get her eyes scratched out if she tried to go in. I shall always plant thornapple bushes wherever I may live, especially for the protection of young birds. And I shall plant several close together, so as to make a dense thicket. These bushes will provide food for birds, as well as protection.

The way these wrens coaxed their little ones to follow was very clever. They would go near them; then walk away trailing their wings. This made a soft, rustling, coaxing sound. But it was over an hour before they succeeded in getting the little ones where they wanted them. They had to come back to them again and again and keep up the coaxing. I was glad when they finally had them safe under those thorny branches, where I could not see them any more for the leaves.

By this time two more young were ready to leave the house. One was already on the little porch, the other peered out of the entrance. These were wiser than the first two. Instead of going to the ground, one flew to the kitchen roof which was near and almost even with the wren house. It was a flat roof covered with gravel. Pretty soon the second baby also flew to the roof.

It must indeed be a wonderful event in the life of a bird when first he steps out of the crowded little home and looks around him at the big outdoors. Then what courage it must take to venture on his

wings! He has fluttered them a few times over the nest, of course, but that is not to be compared with just bouncing out into the air and trusting to his wings to bear him up.

The two stayed on the kitchen roof all the rest of the day. I put a potted plant out there for them to perch on. In the morning one of the baby wrens perched for a little while on a window sill, but Father Wren coaxed him back to the roof. I put several more plants out on the roof in order that the fledglings might exercise their wings and strengthen them for the long flight they would have to make to the nearest tree. After a while they did fly from plant to plant. In this way they spent the rest of the day and they liked it so well that they stayed another day, and perhaps longer.

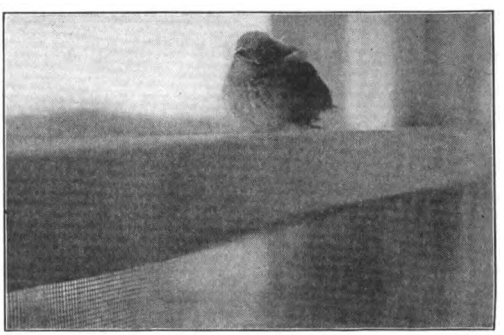
I was absent from home a few days. On my return the apartment house was empty of baby birds; so also was the small house in the pear tree. The wrens were pulling out the feathers and grasses of the first nestings, and getting ready to nest again. One pair had already begun nesting in an unoccupied apartment. Can anyone imagine the hustle and bustle of those busy wrens, cleaning house and nesting at the same time, and the joy with which they did it?

The one-room house in the pear tree was so made that the front could be raised after turning a small screw-eye on the side. This made cleaning it easy

Now, aside from furnishing their rooms all over again, these wrens had their babies to care for. But they seemed the happier the more work they had to do. They were just bubbling over with happiness all the time; and they made everyone about them happy, too.

I should think everybody would put out wren houses and get these jolly little fellows to live near them. Wrens are not particular whether they live on a porch, in a city yard, or on a farm. They are just as happy in one place as another, as long as they have a safe little home; and they will rid a place of bugs and flies and other unpleasant things.

So cheery was that summer with those wrens around me, that I hope always to have them as my neighbors.



A BABY WREN ON THE WINDOW SILL

BLUEBIRDS ARE GREAT HELPERS IN A GARDEN (*See page 33*)

VI

THE BOY

One day in early April I was in the ravine getting hepaticas. Before I knew it I was near the boy's house again. His mother called to me from her garden.

"The boy is at home now," she said; "maybe you would like to see him at work."

I thanked her, and went with her to the little shop. There beside his work bench stood a boy about twelve or thirteen years old. He was painting the wren house a dark green. The bluebird house was finished, ready to put up.

I told him I had put up my bird houses long ago, and that the bluebirds had been house hunting for some weeks. He said that there were so many English sparrows around his place that he feared they would nest in his houses if he put them out early. But he had just learned of a way to keep the sparrows from nesting in bluebird houses. He said his manual training teacher had advised him to mount his houses for wrens and bluebirds only about eight feet from the ground, since the English sparrows seldom nest lower than ten feet from the ground, and will not be likely to take a house that is lower.

The boy put up the bluebird house while I was there, on a young maple that afforded plenty of shade. His bluebirds were house hunting too, and visited the house right away.

I told him about the tin sheeting to keep cats and squirrels down. He said he had been using tanglefoot, the sticky stuff that is sometimes put on trees to keep bugs down. But he said that cats and squirrels didn't mind climbing over it, and he was going to try the tin.

I fear that the boy was not wise in delaying so

long to put up his bird houses. When I saw him again, in mid-April, he said that one pair of bluebirds had nested in a house that he had intended for chickadees; that another pair were in an old hollow tree; and that a pair of wrens were visiting the new bluebird house.

Two of his other houses were for woodpeckers, and a beautiful new one for purple martins already had some tenants.

"It is two years now that the first martin house has been up, and yet I have never had any martins to stay!" said the boy. "They would come, go into the house and twitter, and then fly away."

He began talking again about his manual training teacher: how she called one day, and told him that the martin house was mounted too low, and too near trees; that martins want to be fifty feet away from a tree or building, and sixteen feet up from the ground; also, that it pleases martins to have openings near the ceiling of their rooms so they can have a change of air.

I remarked that this ventilation would make their rooms more comfortable.

"Yes," said the boy; "and this new martin house is made according to teacher's directions."

As we stood there, martins were flying about, twittering, singing, perching on the telephone wires near by and on the roof and the porches of their house. The pole had hinges so that the house could

be brought down and cleaned, when necessary, or closed.

One lovely June day found me again at the boy's home. I remarked the large number of young robins on the lawn.

"The young have just left their nests in that tree," answered the boy, pointing into a big cherry tree. "Robins have nested in that tree every year since I can remember."

I guessed that perhaps the cherries were the attraction.

"Well," he said, "we think birds earn all the cherries they eat; we never pick those on the top branches at all, but leave them for the birds."

During that visit the boy showed me several bird homes. First he apologized for doing it. "Every bird home is a secret between mother and me," he said; then added, "but I know I can trust you."

One of these little homes belonged to bluebirds. The others belonged to the flicker, the wood thrush, and the killdeer.

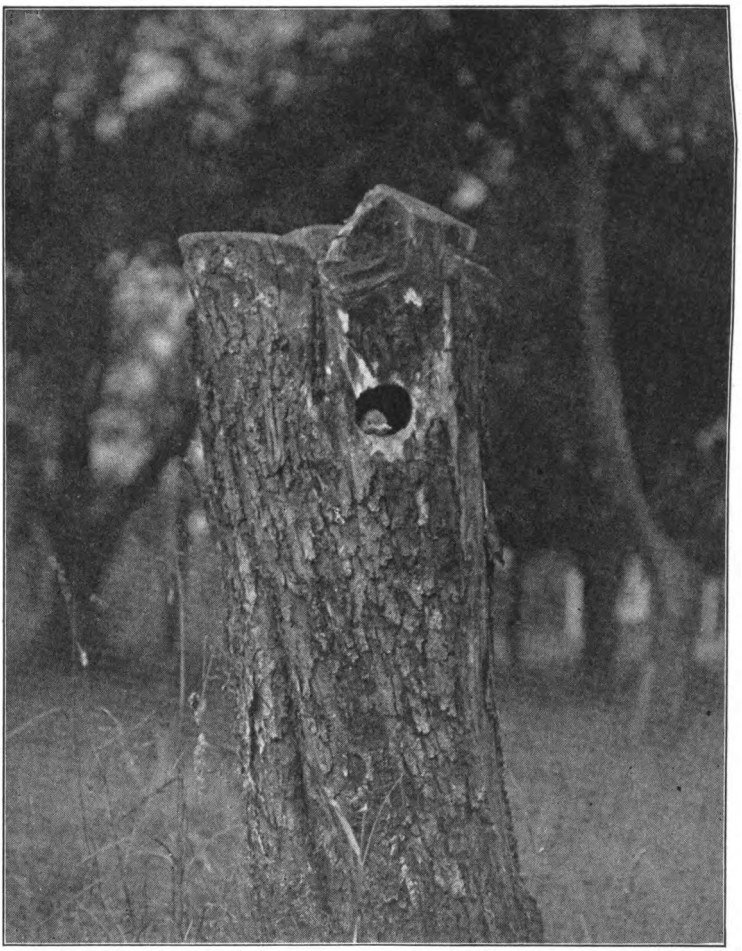
We walked slowly and talked low, as we went from one place to another. Loud talk and running frighten birds. And to go very near to a bird nest is harmful because, every time the mother is frightened away, the eggs or young are liable to get chilled if the weather is cool. If hot, and the nest is exposed to the sun, the eggs or young are liable to get overheated.

The boy told me of a marsh hawk's nest which a gentleman came to photograph. He said that this gentleman brought a lad along to hold his hat over the young to shield them from the sun, during the mother's absence. The two were there only about ten minutes. But evidently that boy told other boys; for soon the nest was being visited at all times of day. At every visit, the mother flew away, and in a few days all the young were dead.

I remarked that photographing nests should be done with the greatest care; that if any screening foliage was pushed aside, it should be replaced, and the nest left just as the mother bird had planned it. It is indeed fortunate that bird photography is so difficult that only few people attempt it. Exposing a nest to the camera is very apt to result in disaster unless it is done by one who has the highest interests of birds at heart.

The flickers had their home in a stump of a tree. The entrance was so low I had to stoop in order to look in; but the nest was down deep, out of sight. Whenever Father or Mother Flicker came with food they called softly, "Ye quit! ye quit!" Then the babies could be heard making a hissing sound. Sometimes when the parents were gone longer than usual, a baby flicker could be seen taking a peep at the outside world.

One day during the previous spring while walking along the ravine I had seen three of these large brown



BABY FLICKER PEEPS AT THE OUTSIDE WORLD

birds, and had learned their name from hearing them sing, "Flicka flicka flicka." It is easy to get ac-

quainted with birds who are named after their song. One of these birds on that spring day was constantly spreading his wings and his tail before the others, as if he wanted to show the beautiful yellow feathers underneath. Because of these yellow feathers the flicker is also called goldenwinged woodpecker. Nearly all birds have a scolding word. When the flicker wants to scold he says, "Queer," as plainly as a person can say it.

Of course, we never went near enough to any bird's nest to frighten the brooding birds, nor did we stay long enough to keep the parents from feeding their young. We always found a convenient place fifty feet or more away, and through our field glasses watched the birds without annoying them.

I had long known the wood thrush by his yodeling song. It usually came out of the thickets and tangles in the ravine back of our place, so the singer could not easily be seen. At sunrise and sunset, the music of the thrushes, singing and answering one another, was like bells calling to prayer. From early May until mid-July I always wanted to be out mornings and evenings to attend the matins and the vespers of the wood thrushes.

Mrs. Wood Thrush tried hard to hide her nest; it was completely surrounded by thornbushes. "Wit-a-wit-a-wit," said her mate as we went near; then he came out of his hiding place. He had a brown back and a white and brown speckled front just like

MRS. WOOD THRUSH ON HER NEST

Mrs. Wood Thrush, who sat serene on her nest all this time. She was trusting in something to protect her fully; whether it was her brave companion, or those bushes bristling with thorns that surrounded her nest, I do not know. Maybe she thought we didn't see her at all. We pretended not to see her.

Always, when I find a nest, I turn away and try to keep the birds from knowing they have been discovered. I look out of the corners of my eyes, and go away humming a tune. After a while I return and walk near by, again singing the same tune.

I do this as many times as I can during a day or two. Before long the birds seem to know that the person who comes singing that tune has never harmed them. They remain quiet when I am near, and this affords opportunity to observe them more closely.

Some bluejays were flitting about. Bluejays are everywhere, and at all times of the year. The bluejay is that big blue and white bird with handsome crest. In early spring he sings some pleasing notes, but in autumn and winter he is just noisy. Now he was very still. I could just see Mrs. Bluejay's head between two branches of a poplar tree. She had a nest there, for there were tell-tale twigs hanging over on both sides. Mr. Bluejay did not want anybody to find her, nor the nest. This was why he kept so still.

The boy had scattered some peanuts on a bald spot in the yard. I asked why he did this during the summer time.

"It keeps the chickadees and woodpeckers coming here all summer," said he.

As we sat there a bluejay came for a peanut and went under a tree with it. There he punched a hole in the ground with his bill and poked in the nut. Then he went to a currant bush and got a leaf. Returning to the spot where he had buried the peanut, he patted the leaf neatly over it.

A brown and white bird about as big as a robin flew overhead singing, "Killdeer killdeer" as loud and as fast as he could.

A KILLDEER'S NEST IN A POTATO FIELD

"There goes a killdeer," said the boy.

So the killdeer is another bird that is named after his song! How easy it would be to know birds if all were named after their song, like the chickadees and the killdeers and the flickers, or after their colors, like the bluebirds, or after their actions, like the woodpeckers!

The boy's father had found a killdeer's nest in a potato field when he was plowing. We went to see that, too. It was in a patch of ground overgrown with weeds because the man had kindly plowed around it. Mother Killdeer sat dutifully on the nest while Father Killdeer guarded the premises and told

us by his various shrieks and somersaults that he wished we would not go near enough to disturb her.

On the farm that day I saw the golden-throated meadowlark. He is another yodeler. His favorite tune is:

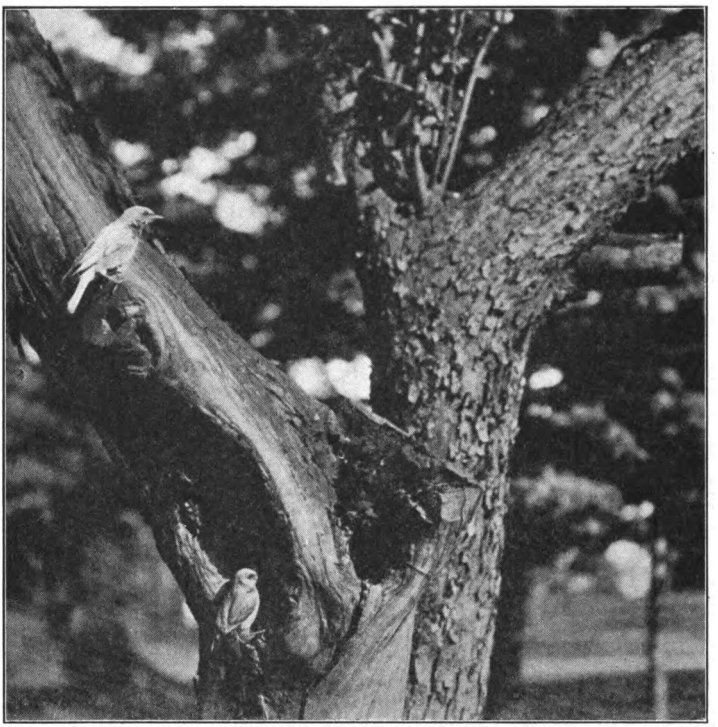
lee-
"Le- o-
o- loo"

His songs ring so clear and flute-like that I can hear him away over at our place. He is a brown bob-tailed bird. Over a beautiful yellow front he has a black band, pointing down in the middle, V-shaped. A large company of these birds were in the meadow, happy as larks; so they are well named meadowlarks.

But think of a dear little bird and such a sweet singer as the song sparrow, bearing the same name as the odious English sparrow! It seems unjust, and in this the boy agreed with me. We got to talking about the song sparrow because one was on a fence post near by, singing over and over this lively ditty:

twe-e je
twe-e je je je
"Twee twee twee je je je jay."
je je

The bluebirds' home that the boy had mentioned at the beginning of my visit was in a hole of an apple



THE BLUEBIRDS IN THEIR PRIMITIVE HOME

tree. By standing on tiptoe I could look in and see four light-blue eggs lying on a nest of grasses that looked like a cunning little basket. It was a hot day, too hot for Mother Bluebird to stay in that hollow tree all the time. She was out playing tag with Mr. Bluebird. Perhaps she thought the hot air would keep her eggs warm. After she went in again he visited her often with food. Before going after

more he usually perched on a little knob just above the entrance and sang. Sometimes she came out on the ledge to listen. It was a winsome sight to see the bluebirds in their primitive home.

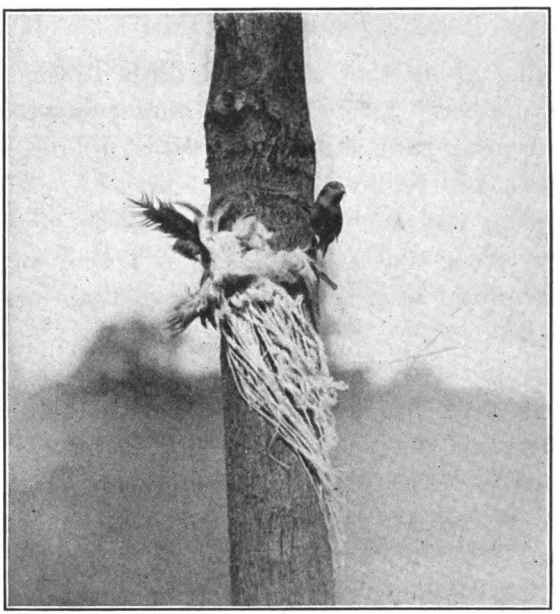
This was the bluebirds' second nesting on the farm. Their first one had been destroyed by the English sparrows. The boy said he had tried in every way to help the bluebirds, and that, whenever he saw any sparrows near, he gave a sharp whistle — his confidential whistle, he called it — and that Mrs. Bluebird got so she understood what it meant; that as soon as she heard it she would come up on the ledge and call, "Dear, dear-dear." Immediately Mr. Bluebird would appear and drive the intruders away.

These bluebirds were also annoyed by a red squirrel who climbed the trees in the orchard and peered into the nest holes. Mr. Bluebird dashed for him whenever he saw him, especially if he found him near the home tree. Sometimes both the bluebirds chased the red squirrel, who would run off barking like a little dog.

The boy had seen how I put out strings and cotton and chicken feathers, for the birds' nestings, and he had fixed up a "store" — as he called it — on a tree, where they could "buy without money." Every little while a goldfinch came and got some string. Always on coming he sang out, "Perchikatee," as if to say, "By your leave." Downy woodpeckers, chickadees, and nuthatches were there at this time of

the year, although ordinarily they are seen only in winter and early spring.

The boy said it was the ravine, with its trees and thickets and tangles, that attracted so many birds.



EVERY LITTLE WHILE A GOLDFINCH CAME TO THE "STORE" TREE AND GOT SOME STRING

He was always praising that ravine. He thought so much of it that he had asked the neighbors not to throw rubbish down there, and not to disturb the underbrush, which shelters so many birds. He had also asked them please to keep their cats indoors at

night, because so many birds had nests and helpless little ones on the ground, or in low bushes.

"Mother put me up to that," he said; and added, "we are trying to keep that ravine as a sanctuary for birds, where they and their little ones can be safe."

Another thing that attracted birds to that place was a mulberry tree. Though only two years old, it was bearing fruit and was visited by robins, orioles, thrashers, and redheaded woodpeckers.

The boy had so many kinds of birds never seen near our place that I began to wish I, too, could live on a farm and have so many more of these charming neighbors.

A storm came up. Soon the shallow places in a cornfield near by were turned into puddles. The baby martins that had been lounging on the porch went inside. The old ones came flying home in a hurry. We went to the garden house, which the boy had fitted up as a workshop because he didn't like to deprive his mother any longer of her little storeroom. When it stopped raining the sun came out and the clean earth fairly glistened. A flock of robins came to hunt for worms in the drenched field. Some bathed in the puddles. It was amusing to watch them chase one away if he stayed in long.

As we were enjoying the robins, the boy's mother called out: "Come here, you bird people, and see what has happened." She took us to the living room

and told us to listen at the chimney. A rasping twitter came from within.

"It must be those chimney swallows," guessed the boy.

He stepped upon a chair and took off the chimney cap. There, scrambling around in soot, were some black looking birds.

"One, two, three, four," he counted, as he reached in and handed them out on a newspaper.

Three were young birds, and one was an adult bird with long wings. Their nest was also there. The heavy rain had loosened it and made it fall.

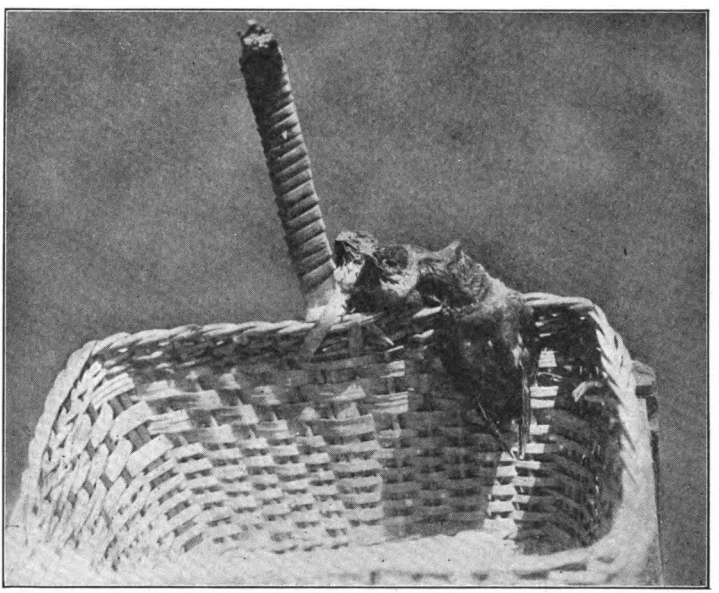
The little ones screeched in chorus, and tried constantly to get hold of something with their claws. The older bird gave no sound at all. She seemed to be hurt. We called her the mother.

The lady looked at their little nest. Then she went and fetched a basket, and, as soon as the birds were removed to it, they began to clamber up the sides. When they got to the top, where they could hang at full length, they stopped their screeching. Only now and then they still gave a rasping sound. Perhaps they were hungry, and scolded because nobody brought them any food. Some crossed over the rim of the basket and tried the other side.

I stayed there the rest of the afternoon. Every ten or fifteen minutes the little birds gave a call, like, "Gitse gitse." Thinking that they must be almost choked with the soot, I tried to give them

water, but they would not open their bills. I forced them open with a manicure stick, and gave them a drop at a time. They swallowed it when it was dropped far down in their throats; otherwise they would jerk their heads and throw it out.

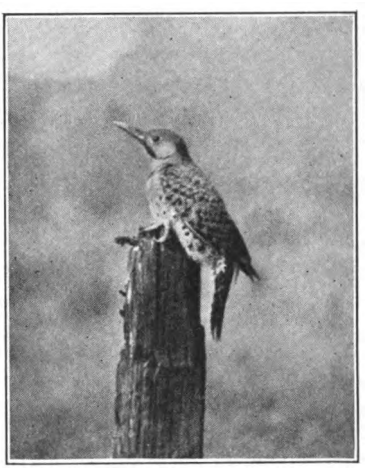
I also moistened a cracker with some egg yolk, and mixed into it about fifty flies out of the flytrap; then tried to feed the birds with the little stick. By prying up their upper mandible I got some flies down each bird's throat. The lower mandible was very soft and would not bear handling.



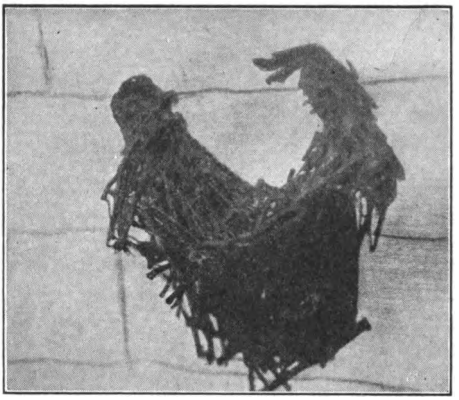
THE CHIMNEY SWIFTS' TEMPORARY HOME

I became so attached to these birds, I hated to leave them, but the time came for me to go home. The boy and his mother seemed distressed at the prospect of having birds as boarders. There was canning to do, besides cooking for extra farm hands; and Laddie had to help his father with the haying, — so his mother said.

I offered to take the birds and do the best I could with them, if the lad was willing. He was; so I took the birds and the nest with me in the little basket, which was their temporary home.



THE FLICKER IS ALSO CALLED GOLDEN-WINGED WOODPECKER



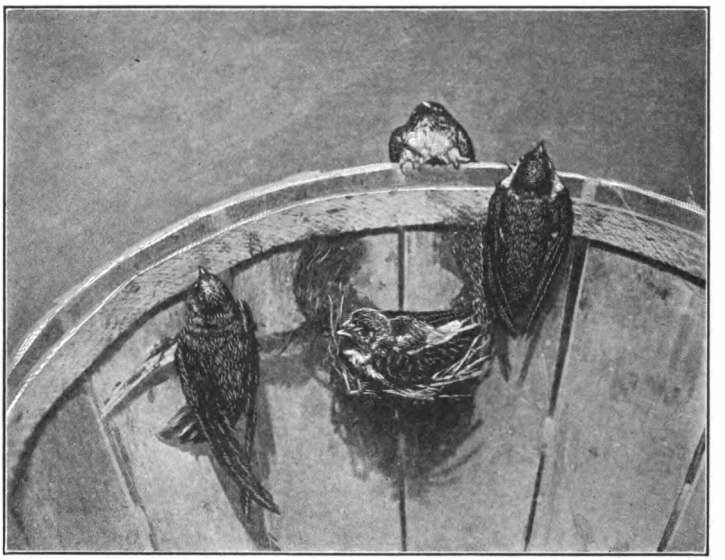
CHIMNEY SWIFTS' NEST

VII

THE CHIMNEY SWIFTS

THE correct name of these birds whose home life was so rudely broken up is chimney swift. According to the bird books, they have been known to fly a thousand miles in a day, and they live in chimneys. Could any name fit them better? Chimney swifts are sometimes called swallows, probably because they resemble them somewhat, and twitter like swallows. But they are not swallows at all.

I thought if the birds could have their nest near them, it would seem more like home to them. It was a tiny nest, a bracket made of twigs which were woven together basket fashion and tightly glued. I have preserved it as an art treasure. On each side is a flat, gluey extension. Wetting this extension made it sticky; but it would not stick to the rough



ONE OF THESE SWIFT BABIES WAS PUT TO REST IN THE NEST, BUT HE DID NOT STAY THERE LONG

surface of the small basket. I laid it on the smooth surface inside a peach basket and put weights on it. When it became dry, the nest was stuck fast.

Then I transferred the swifts from the small basket, which had been their temporary home, to the peach basket. They perched around the nest. One of these babies was put to rest in the nest, but he did not stay there long. They all clambered up to the edge and from time to time they changed places, sometimes crossing over the edge of the basket from one side to the other.

It was fortunate that this happened during my vacation, because the care of a baby bird demands much time. He has to be fed regularly and often. Having several birds to feed is about enough to take up all one's time.

If they only had opened their bills when they were hungry, it would have been much easier to feed these swifts. Their very short but wide bills had to be pried open every time and the food poked down their throats. I tried to feed them every fifteen or twenty minutes. It took so long to feed each one, that usually, by the time I had finished with number four, it was necessary to begin feeding number one again.

The food I gave them was bread soaked in warm milk, with plenty of flies mixed in. For a change I mixed the bread with a raw yolk. I gave them warm water occasionally. It seemed to me they needed it after having come through that mass of soot.

At the end of the first day the young were as chipper and bright as any young birds. Instead of screeching they began to twitter, "Gitse gitse." The mother was very still. She did not seem to care for her babies at all, and did not go near to keep them warm. She just hung in the one position. Several times she tried to fly, but she could only fly a few feet; then she fell to the floor.

During the second day the young seemed to be doing well. They preened themselves, and their

blackish breasts were changed to gray. It was a cool day, and I set the basket where the sun would shine on the birds. They fluffed their feathers as if they enjoyed the warmth. Once in a while one tried to fly, but he always fluttered to the ground and had to be brought back. The mother tried her wings again and again. She got so she could fly a little farther at every attempt, before she went to the ground. At about five o'clock she flew far enough to get out of sight.

All the next day I kept the peach basket with these swifts in it outdoors, hoping the mother would return and feed them. But she did not return.

On the following day these birds began to look feeble. I went to the telephone and called up a gentleman[1] who is an authority on birds, and asked him what I should do. He said the main thing was to keep the birds evenly warm; that more young birds die from chill than from hunger. To revive them he said I should put a few drops of whiskey in a glass of water and give them each a few drops; then I should try to get them some gnats, or a grub from the garden, mince it well, and feed it to them. Flies, he said, had not much nourishment in them.

On returning I found that two of the little birds had died. I determined to try hard to save the remaining one. It was impossible to get whiskey

[1] Dr Francis H. Herrick, author of "The Home Life of Wild Birds."

because I live in a temperance town. I gave the little bird a weak solution of baking soda because he had a big lump in his craw. Then I wrapped him in a silken scarf, and warmed him beside the cook stove as I have seen baby chicks revived when they have been chilled by a sudden rain. The lump disappeared. He brightened up. I could find no grubs; but a few grasshoppers, some ant larvæ, and several juicy green cabbage worms were food enough for the rest of that day. I kept the bird in his wrappings all day, but fixed it so he could clamber on to the basket. At night I put him away warm and snug, and seemingly happy. The first sound I heard the next morning was "Gitse gitse."

The little bird was ready for a meal. From an ant hill near by I got more ant larvæ, something which all young birds like. For the first time now he swallowed food just as soon as it got inside his bill. Up to this time he had jerked it out unless it was poked down. But he still refused to open his bill.

He did not care for the nest and never would stay on it. So I fixed him again in the little basket where he would be more snug. I had lined it with cotton batting and woolen cloth so his breast would be against a soft, warm surface. I also kept him at an even temperature, and fed him regularly. The little basket was on my work table. He seemed to enjoy being near me and being talked to. Sometimes he flew over on my shoulder. I fed him more cabbage

worms and grasshoppers, and also gave him water occasionally.

I could not forgive myself to think I hadn't asked for advice sooner. I felt sure that, had I done so the first day I took charge of these birds, and then followed instructions, the two would not have died.

Again at the close of the day Baby Swift was put away in his warm wrappings. In the morning I did not hear the usual, "Gitse gitse." Baby Swift had gone to the bird heaven.

It had been a big undertaking to adopt those homeless birds; but I am glad for several reasons that I did it.

First, I am glad that I helped them in their trouble.

Second, I am glad I relieved the boy and his busy mother of caring for them.

Third, I am glad because I have since read in the bird books that the chimney swift is a very useful bird; that he feeds wholly on troublesome insects.

Fourth, I am glad because it gave me opportunity to get acquainted with one more bird. I consider that something worth while.

A ROBIN'S NEST

VIII

BIRDS NOT OF A FEATHER

ONE day, on looking up into a tree in the vacant lot, what should I see there? A mother robin just dropping a worm into her baby's open beak.

The nest was right in the crotch where the trunk

forks into two main branches. So many robins' nests are blown off the branches by the wind, or washed off by heavy rains, that I was glad to see this nest firmly saddled on that strong trunk. But a second thought told me that it was easy for cats and squirrels to get at, so I studied how to make it safe.

All the tin sheeting had been used up; but I knew where there was some old stove pipe. A kind neighbor ripped it open. One piece was not wide enough to go around the tree, so I had to use two. Mrs. Cotton, who had again become my neighbor, having built a bungalow on one of the vacant lots, came to help me. She said it wasn't good for the tree to drive nails into it, and fetched some wire. Meanwhile, I got the stepladder; for the sheeting must be high enough so that cats and squirrels cannot jump from the ground to the trunk *above* it. We used only two small nails, to keep the wires from slipping.

Of course, the robins scolded while we were doing this. They never liked to have anybody near their tree.

After a week the young ones were sitting on the edge of the nest. I knew then that they would soon leave it, and I began to keep a close watch on them, and on the cats of the neighborhood.

If all cats belonged to people, and had to be kept on their own premises, little birds would be much

safer. As it is, cats may roam wherever they please. They can crouch in tall grasses, flower beds, shrubs, and other places, ready to pounce on any bird that comes near enough. Homeless cats who have to hunt their living are the greatest menace to birds, especially to young birds who are not yet wise to the dangers that surround them. Now who is to blame? Surely not the cats. Instead of continually berating the cats, let the friends of birds secure laws to license cats, to compel people to keep their cats on their own premises, to punish people for putting cats astray, and to put homeless cats out of their misery.

One June day, while walking along the ravine, I saw three robins on the ground. I went to the tree to see if the young had all left the nest, and found that one was still there. He looked down, as if he would like to go to join his brothers; but he seemed to be afraid to leave the safe little home. The parents brought food to him and also to those on the ground. Whenever the parents went to the one on the nest, they urged him to come over to some of the near branches; but he stayed on the nest as if glued to it. Finally, one of the parents got behind him and just politely pushed him off. He spread his wings to fly, but fluttered to the ground. Instead of continuing my walk that morning I stayed with the robins. About a hundred feet away I could see them well with my field glasses. My neighbor,

Mrs. Cotton, was just as much interested in these birds as I was. They could not fly well yet. Between us we saw to it that no harm befell them that day.

Towards evening the robins also sought the protection of those bristly thornapple bushes. One by one they coaxed the young in that direction.

During that night a great storm came up of lightning and thunder and rain. I was sorry for the young robins, but had no doubt that their parents shielded them. I have seen a mother bird sit faithfully on the nest when the rain was pelting her mercilessly. Mother love knows no discomforts.

I think all birds enjoy a good shower; they always sing joyously as soon as it clears again, and sometimes while it is still raining. Some also enjoy a shower bath. Sometimes they finish it with a ducking in the basin. Those that do not care for the shower usually know where to find a comfortable place during a heavy downpour. On such occasions, I have seen them take refuge in trees, close to the trunk where it is steady and where the foliage is dense over them. And I have seen them go for shelter under rail fences, such as there are in the country; where the rails are broad enough to protect a little bird. I have also seen birds come out from under a corn-crib after a rain, so I presume they had gone under it for shelter.

After the robins had left their nest I took the sheeting off the tree. It is said that the bark of a

tree is its lungs through which it breathes. I want all the trees around me to breathe deeply of the precious air, so I try always to save the bark. It is much easier to take off the wires than it is to take nails out of a tree. Already some insects had made nests and cocoons under this sheeting.

My way of getting acquainted with birds was by keeping a notebook. In it I wrote everything I saw any bird do: what he ate, how he sang, what he looked like, where he was generally seen, etc. I always watched a bird as long as it stayed in sight. When it left I observed its flight and its shape. Then I looked at the colored pictures in my bird books, to see if I could find a bird similar to mine. If I did find him, then I read all about him to see whether that bird ate the kind of food, and acted, and flew, and sang, in the way my strange bird did. If he did, then I knew I had made the acquaintance of a new bird.

For instance, I had written about one bird:

"Rather plump, head pointed, bill long. Head and back olive. Front yellow. Wings dark with white bars. Tail brown with dark marks. Is on the fence getting strings. Also visits the basin. Never sings. Likes bread crumbs. Nearly as large as robin."

Sometimes there came with this bird a beautiful black and orange bird. In a little pocket guide I found both these birds pictured as mates. They were the Baltimore orioles. She was the bird I had

described in my notebook. While she was getting strings, her mate was usually up in a tree somewhere near, singing:

"Hee ho hee, hee ho ho hee."

It was no wonder that the orioles needed so many strings. They made a baglike nest on the tip end of a branch in Mrs. Cotton's elm. The wind used to swing that nest like a hammock. I often thought how nice it must be for those baby orioles to be rocked by the wind and to have such a fine musician for their father.

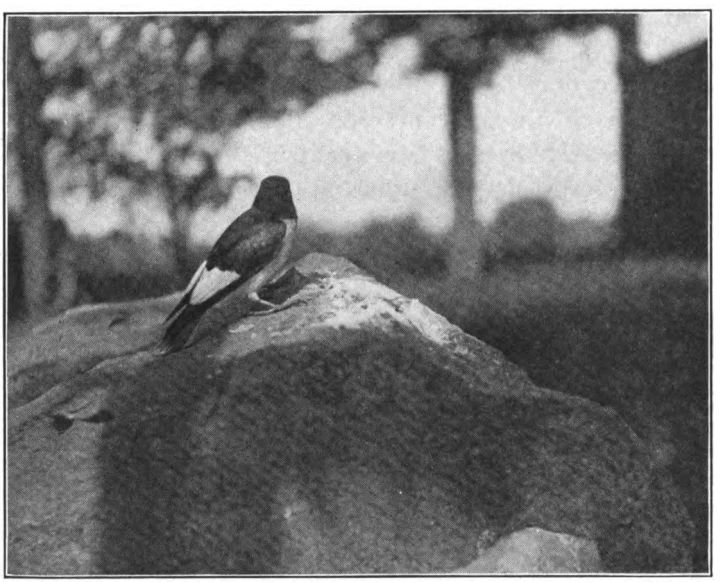
Mrs. Cotton was keeping her cat housed during those days. Moreover, she threw bread out on her lawn every day for any birds that might want it. The orioles were among the birds that went there; they preferred graham or entire wheat bread to white bread.

Other birds that came to my yard were the brown thrasher, the goldfinch, and the redheaded woodpecker. They had their nests along the ravine.

The redheaded woodpeckers' home was in a hole of an old tree near the ravine. Their call was a guttural "Chr-r-r," which was pleasant to hear. Near the nest tree was a big stone which they used as a convenient perch. The woodpecker babies did not have the showy red head and neck of the parents; theirs were of a rusty color, and the white on their wings was barred with black. During the summer, Father Woodpecker often brought the babies to the food station. They could help themselves pretty well

to suet; but the peanuts were a puzzle to them. They just pecked into the shell and tried to eat that. Usually, before the babies arrived, the father came and perched on some high point and looked all around. If all was to his liking, he sounded his rattling tattoo. The babies always came so promptly that it was evident he had hidden them somewhere near, probably with orders to await his signal before venturing farther.

I think the brown thrasher must have had a large family; he used to tear off pieces of bread and carry



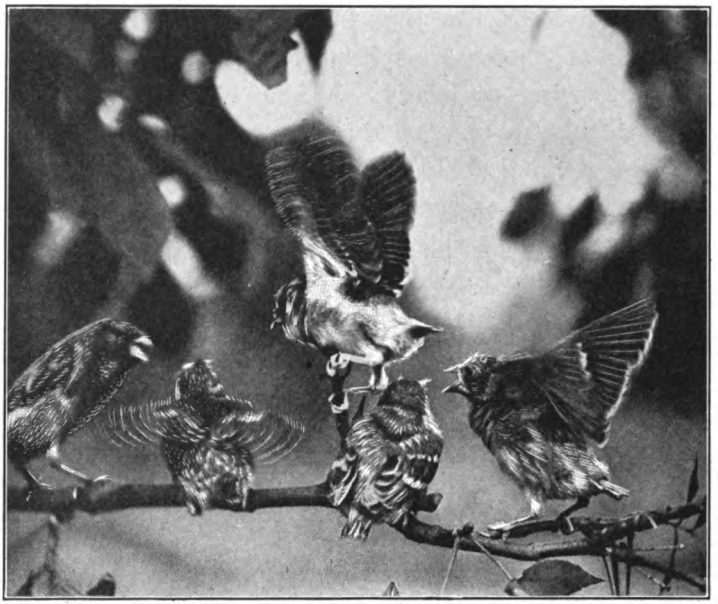
NEAR THE NEST TREE WAS A BIG STONE WHICH THE REDHEADED WOODPECKER USED AS A PERCH

them away from the bird table. Once he carried off a piece of cheese that kept him trailing near the ground, it was so heavy. A blackbird followed and tried to take it, but the thrasher got away from him.

A queer thing about the brown thrasher is his song. It is made up of real words and sentences, and he sings everything twice or more times. If you should ever hear a big brown bird, with a long reddish tail and speckled breast, sing, "Beverly Beverly," "Peter Peter," "Tell it to me! Tell it to me!" "Come here! Come here!" and such things, then you have heard the brown thrasher. If you will look high enough you can almost surely see him too, in the top of a high tree. He loves to be seen as well as heard.

Mrs. Brown Thrasher looked just like her mate. She had hidden her nest so well that I did not find it until it was empty. It was in a dense thicket. I knew it was hers because she was still near. "Io-it! io-it!" she scolded, until I went away. One little baby thrasher was on a branch of the thicket. The mother was guarding him.

The goldfinches were very late with their housekeeping. In July they were still gathering strings and cotton for their nesting. They are just as polite and gentle as the chickadees. Their name fits so well that anybody who sees these yellow birds, just like canaries with black wings and tail, ought to know them at once. Their song usually starts with



EACH LITTLE GOLDFINCH CALLED AS LOUD AS HE COULD

"Sweet sweet sweet," and the rest is a regular canary song. They are sometimes called wild canaries.

The young goldfinches loved to sit on the edge of their nest as soon as they were old enough. As they sat there they chattered to each other, "Ze bebe, ze bebe," and fluttered their wings a great deal. When I found their nest I was surprised that I hadn't seen it before; it was low on a buckeye.

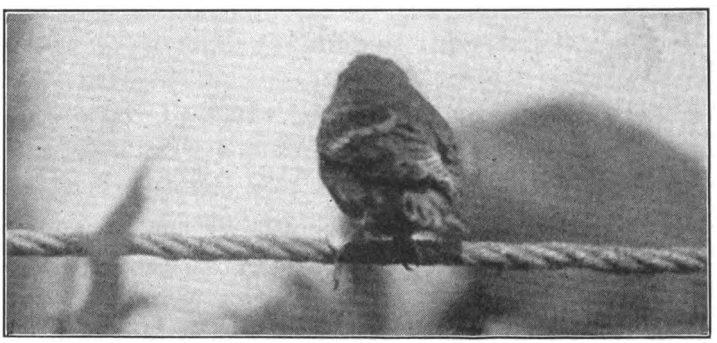
When the young goldfinches left their nest it seemed as if they wanted to get acquainted with people. They came down on the lowest branches,

and quite near the house. One alighted on the clothesline. Whenever Father or Mother came with food there was the greatest fluttering of wings. Each one called, "Ze bebe ze bebe," as loud as he could, and opened wide his bill to catch what the parents tossed or squirted out to him. It was no living, squirming thing, but a pulpy mass.

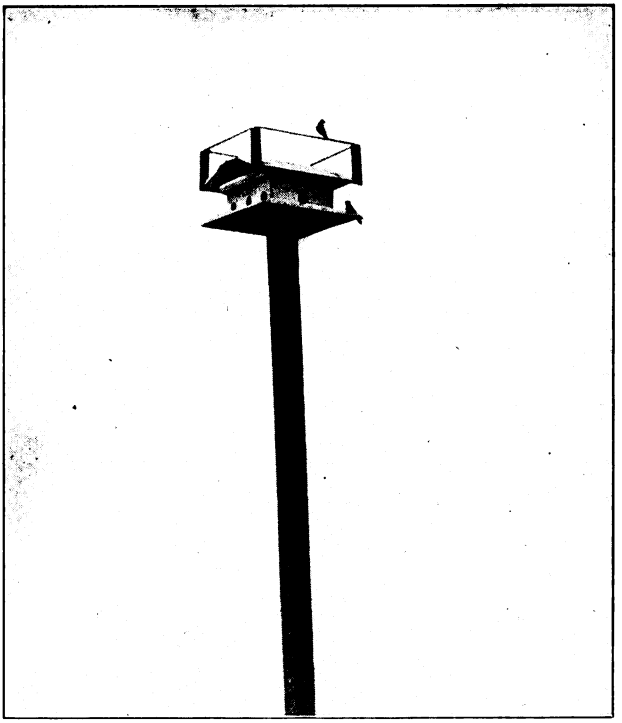
The young were yellow in front, olive on the back, and they had black wings with brown and white bars. The black tail was edged with white.

Goldfinches like sunflower seeds. But the main reason why they are so useful and so well liked is that they eat large quantities of thistle seeds and dandelion seeds.

When cold weather came the parent goldfinches were no longer so beautifully yellow, for they had put on their gray autumn coats.



A YOUNG GOLDFINCH ALIGHTED ON THE CLOTHESLINE



THIS MARTIN SCOUT BROUGHT A LADY WITH HIM

IX

THE MARTINS' AIRCASTLE

THE purple martins like a house with many rooms, so they can live together in a large company. Since the martins belong to the swallow family, to call them purple swallows would, it seems to me, be more informing.

My friend who had sent me the wren apartment

house was so pleased with its success that he sent me also a martin house. It is four stories high and has twenty-six rooms. Around each story are porches, some of them several inches wide.

It pleases birds to have their houses look, before they occupy them, as if they had been out in all sorts of weather. So, for several weeks before this martin house was set up, it lay out in the yard to be rained and snowed on.

One cold March day a purple bird came in at my window. He perched on picture frames, twittered a little, and went out again. According to the bird books, my little visitor was a purple martin. Maybe he had seen the martin house on the lawn, and came to ask me to put it up. Anyway, the next day it was mounted in the farthest corner of the garden. For, according to the directions that came with the house, martins want their houses to be fifty feet away from any building or tree, and on a pole at least sixteen feet high.

In early April another martin came; or maybe it was the same one, returning to see whether the house had been put up. Martins always send one of their number ahead to look up a house for them. He is called a scout. This martin scout perched on the wires nearby, and tried repeatedly to alight on one of the porches of the martin house. But some English sparrows were there; they also wanted that house. Every time the scout went near, these

sparrows flew at him and kept him from getting a foothold on the house. Sometimes he managed to perch on the roof and there wait for a chance to get inside. But the sparrows were too many for him. Now and then he gave a sad note, as if he were discouraged and calling for help. Then again it seemed as if something had encouraged him, and he sang out clearly something like this:

"Whew whew whew
tr–r–r–r
cho cho cho cho."

After holding out against the sparrows for three days, he went away. About a week later I heard a sweet and happy twitter. Several martins were flying around the house. I had named it The Martins' Aircastle. By this time the English sparrows had begun nesting in some of the rooms.

The martins perched on the wires in front of the house and made a saucy chatter, calling the sparrows all sorts of names, I suppose. The sparrows jabbered back at them. In about an hour the martins left.

Early the next morning another flock of martins came. Some perched on the wires, some on the roof, and some on the porches of the martin house. Others flew around in big circles. All were twittering and calling in their happiest manner.

I had driven the sparrows away the night before, and this is how I did it: I put a few big nails into

THE MARTINS' AIRCASTLE

a tin can, then closed the can and tied it to a long stick. With this stick I banged the can against the martin house pole again and again. It frightened

the sleeping sparrows. By the moonlight I could see six come out and fly away; but I think there were more.

Two pairs of sparrows came back in the morning. They had made their nests side by side in the third story. Long grasses were hanging out from the entrances. Perhaps the martins were sorry for them; anyway, it looked as if they were willing to play fair. They did not chase them off any more; and the sparrows, being now so few, no longer molested the martins.

The martins now began to clean house. There were wads of chicken feathers and some broken eggs among the rubbish which they threw out. This was soon replaced by straws and sticks which they brought for their own nesting. I could only count twelve pairs of martins, so that there were plenty of rooms for them and the sparrows too. I suppose one reason why the sparrows were unwelcome is because they are such untidy housekeepers as to render close neighboring with them insanitary.

The more I see of martins, the better I like them. They are always cheerful, always busy. Their shiny, purple plumage, broad shoulders, and tapering body give them a distinguished air. These purple birds are the father martins. The mother martins' back feathers, when exposed to the sunlight, have all the shades of violet. In front they are cream-colored, and finely speckled.

These violet-colored ones stayed around home more than the others; this is why I took them to be the mothers. The father martins flew around and brought in the provisions, which they caught on the wing. On returning a martin would sometiines sit on the porch and sing into the room to his mate; or she would come out to him, and the two would coo to each other in the most affectionate manner.

The martins were also friendly with all their bird neighbors. But they were so high up that their housekeeping was for the most part a secret which they wanted to keep to themselves. It was hard to tell what they had to eat, except when one caught a dragonfly or a grasshopper. When one got a big catch like that, he usually held it squirming in his bill a while as if he was proud of it and wanted to show it off. Or maybe he tried in this way to prolong the enjoyment of it. When it began to disappear in his bill the body always went first and the wings last.

Martins are not strong on their feet. Even when walking around on the porches of their house they just waddled, like ducks. But at flying they are masters. They can soar high, almost out of sight, then shoot straight down and skim along close to the ground.

Sometimes the martins visited the basin to get a drink or to bathe. One of their favorite pastimes

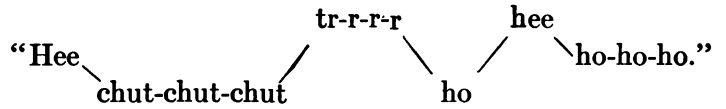
was to roll in the sand in our garden. When around home they loved to perch on the wires or lounge on the porches. They also visited a bald tree not far off, and there preened themselves. I never saw them visit trees that had foliage on them.

Some more English sparrows tried from time to time to come back. It seemed as if they watched for the martins to go away. Then they would come and peer into the rooms, and even go in. The martins, however, always left one of their number on guard, for usually the intruders were soon chased away.

Once a martin caught an English sparrow in his room. He went in, but kept one wing outside, and that wing flapped and fluttered just like a flag in a high wind. No doubt the sparrow got a good beating with the other wing. Sounds of "Kr–r–r! kr–r–r!" came from the room. "Kr–r–r!" is the scolding word of the martins. It sounds as if someone, walking beside a picket fence, were scraping it with a stick. I have often heard the martins say it to the sparrows, but never have I heard them use it among themselves. They are the most contented birds, always polite and kind to one another. For good behavior I have put them on the honor roll with the chickadees and the goldfinches.

The martins are also wonderful singers and whistlers. They sing all day long, and often after dark. Their song is made up of three parts: a

sibilant or smacking twitter, a trill, and a whistle. To me it sounds something like this:



They keep this up in a sort of conversational fashion, and as they do so are continually changing places on the housetop, the porches, or the wires.

In June the baby martins began to lounge on the porches and to sun themselves on the wires. After a while there were more babies. The porches were covered with them. My! how busy those parents were! As babies increased in numbers, evidently the parents felt that the older ones ought to become self-supporting; but they preferred to spend their days preening and twittering and being waited on. The parents pecked and scolded them, and finally pushed them off their perches to make them go and hunt food for themselves.

One day after the second batch of babies had appeared outside, two hawks came and perched on the telephone wires near the martin home. My attention was attracted to them by the guttural calls or scoldings of the martins. As they called, they flew swiftly to and from the house, and around in big circles. Soon the wires were lined with martins that had come from other colonies, and the air was rent with their guttural shriekings. Evidently they felt that these

big birds were a great menace to their young. To the credit of the English sparrows it must be said that they also flew around with the martins, and tried to help them call attention to the danger. The hawks stayed about fifteen minutes, looking constantly in all directions; for they were completely surrounded by the vigilant and frantic martins all that time. Then they flew into a bald tree near by, and after looking on from there a while they flew away. They returned a few times after that, but never again stayed long enough to cause such a commotion.

After the young were all able to fly, the whole company was usually away most of the day. Early in the morning when they were getting ready to go, and at sunset time when they returned, there was always a great demonstration, with trilling, and twittering, and whistling, about the house and on the wires. The home-coming of the martins was a daily event to which not only we, but our neighbors also, looked forward.

Then, as night set in, there was a steady chorus of cooing as if each martin mother were singing a lullaby to her numerous babies. We used to wonder how they all existed in those rooms, six inches square by six inches high. For no matter how hot the night, they all went inside before midnight.

One evening my former neighbor, Mrs. Daily, was present when the martins returned. She also had

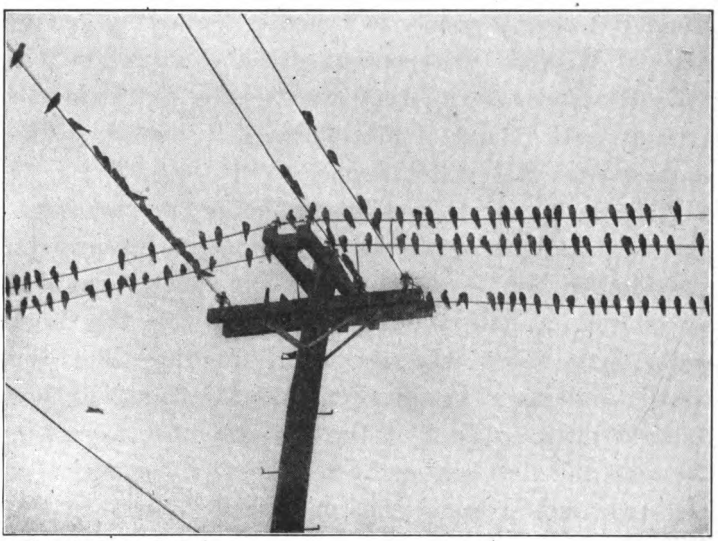


Photo by Joseph H. Dodson

THE HOME-COMING OF THE MARTINS

put up a martin house, but so far it had not been occupied.

"Your house has such wide porches, and mine hasn't any," she remarked, as she watched the returning birds sit on the porches and coo to each other. "And," she added, "I have been told that my house is too near the garage."

It is true that martins are not easily attracted; but when once they have accepted a house they will be steady summer tenants for years. When I think what a pleasure it is to have a flock of these lovely birds, year after year, from April to September, I

wonder that any good-sized yard is without a martin house. Martins are content to live anywhere, in town or country. All they want is the right kind of a house with plenty of room around it, and they like some wires near by for perches.

It seems to me that a martin house, perched high in broad sunlight, needs ventilation. But this must be provided without causing drafts. It can be provided by making a half-inch horizontal slit on the inner walls just below the ceiling, something like the ventilation in a steamer cabin. Martins will not tolerate drafts. Then if the two topmost rooms in the martin house are made to connect by means of a hole two and a half inches in diameter, next to the ceiling, this will greatly assist the visiting scout. When English sparrows see the scout enter the house, they will lie in wait where he entered, expecting to molest him when he comes out. But if he can leave at another exit and get his colony while the sparrows still wait for him, they will have to surrender when he returns. It is a question of numbers. This kind of house, even though it have only six or eight rooms, will attract martins, and promise a good beginning in martin lore.

My neighbor, Mrs. Cotton, has now a martin house also. It has ten rooms, ventilated as described above and with the two upper rooms connecting. There being no telephone wires near enough, a wire running over the house on four uprights serves the same purpose.

The first martin that was seen to visit this house brought a lady martin with him. Maybe he had been there before, alone, without being noticed. The pair inspected the rooms, then perched on the wire overhead and preened. Every little while Mr. Martin twittered:

"Chow chow chow
choo hee
choo ho
choo ho
ho ho"

and

"Yo
yo
yo
yo
yo."

This pair took possession of the upper east room. The next day four more martins came. One pair took a lower east room, the other took the south room. It looked as though the wire on top and the ventilation pleased them. I was overjoyed that this house, which I had designed, proved satisfactory to these notional birds.

The dimensions of the rooms in this house are six inches square by seven inches high. The diameter of the entrances is two and a half inches; the width of porch five inches. The pole extends through the

center of the house and is screwed to the roof. The rest of this house is held in place by means of a bolt underneath, which can be taken out and the house — without its roof — let down to be cleaned.[1]

Now listen to the good that martins do: A martin will eat mosquitoes by the thousand every day, besides many insects that injure fruit trees and spoil the fruit. To protect their young, martins will drive away hawks and other big birds that come near. In this way they also protect any poultry yard near by. On moonlight nights they hunt the moths and millers until midnight.

In late August the martins began to assemble in ever increasing numbers, getting ready for the journey to their winter home, which is said to be in Central and South America.

During one of the days while those gatherings were going on, the boy was here. The martins had, by this time, become so confiding that we could go clear up to the pole on which their house was mounted, — and they would stay on the wires and look down at us! I told the boy how I had driven the sparrows away from the martin house, and showed him the stick with the can tied to it. He tried it on the nearest telephone pole, and instantly the martins flew from the wires. It looked like a great gathering in mid-air.

The father martins were much darker at this time

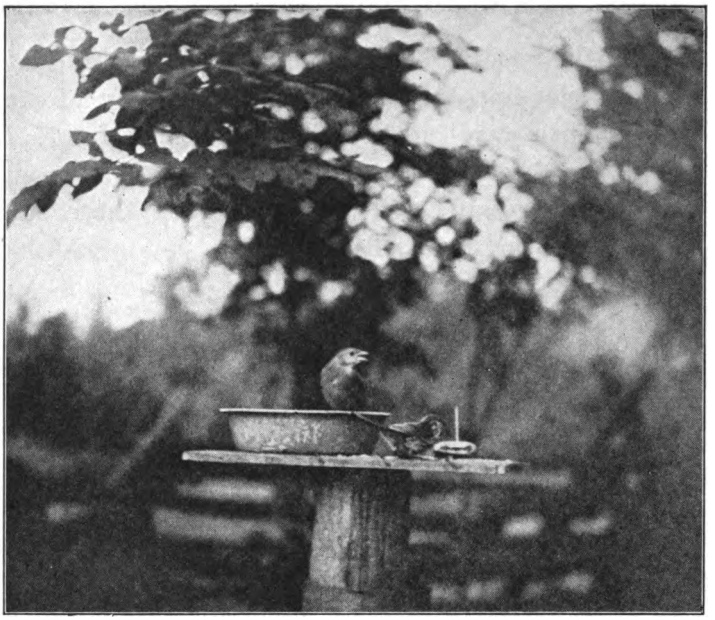
[1] A still better plan for lowering a martin house is described on page 129.

than in the Spring, — in fact, almost black. Mother's pretty violet hues had faded to gray. Baby Martin was brownish-gray on the back, and light in front.

One day the whole colony departed, a jolly company, leaving us sad indeed, but hopeful that they would return with the Spring flowers.

Photo by Joseph H. Dodson

A GREAT GATHERING IN MID-AIR



A BATH FOR BIRDS AND A LUNCH BESIDE IT

X

MORE ABOUT THE BOY

I AM sure that the farm at the end of our street is like home to the birds of the neighborhood, and that that good boy is big brother to them all. He always has a bath for the birds set out on a table, and a lunch beside it.

"You would be surprised to see how well the birds like oatmeal mush and other cereals," said he, the last time I was there. "Just watch that song sparrow!"

The little brown bird was feeding on a shredded wheat biscuit. She stayed long enough to eat a hearty meal; then took away as much as she could carry in her bill. While I sat there she returned several times for more.

We were out in the boy's workshop. He had just finished making what he called a food house. It was a tray roofed over, "to keep out the rain and snow," he said.

I remarked that it was early (it was in July) to talk about snow.

"Oh," said he, "this is one of my vacation jobs. After school begins I won't have time for these things. I'll be a freshman in High, you know."

The tray was about a foot long and not quite so wide. On each side there was a wire pocket to hold suet. Four neat, round sticks supported the roof, which he said was made out of the sides of a soap box.

I asked where he got those fine round sticks and that pretty tray. He said the sticks were scraps from his uncle's cabinet shop, and that he got the tray from the grocer. The name "Neufchâtel" was printed on the sides of the tray in big letters.

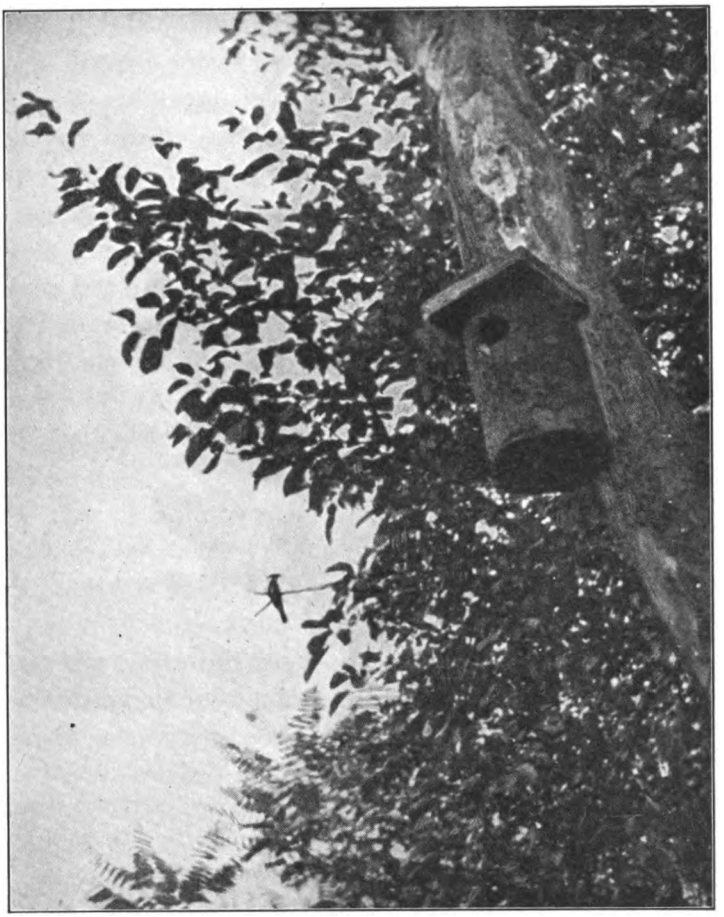
I said, "Wouldn't it be nice if all the Neufchâtel cheese boxes were made into food trays for birds?"

"Yes," he answered, "I know that our grocer would rather give his boxes away for some useful purpose than to burn them."

I admired the little food house so much that the boy gave me some sticks so that I could make one, too.

Then he told me of a pair of cedar waxwings that had nested in the orchard, and a pair of crested flycatchers in a woodpecker's house. I was very curious to see the waxwings, so we went to them first. The nest was about ten feet up in an apple tree. With our field glasses we could see it quite plainly from under the nearest tree. Mrs. Waxwing was sitting up there; we could just see her head and her tail. Mr. Waxwing visited her every few minutes with some food. They were the quietest birds I have ever seen. What they did say or sing was in very soft tones, as if they were telling each other secrets. I hummed parts of the little song occasionally. When I explained to the boy why I did so, he smiled, and looked as if he didn't quite believe me.

We went from the waxwings to the flycatchers. They lived in what the boy called a Berlepsch house. That means it was designed by a man named Berlepsch who was a great friend of birds. The boy said his uncle in New York had sent him the house as a birthday present. What could be a nicer gift for a boy than a bird house? It would make him want to get birds in it, of course. And I can think of nothing that would make a boy happier than to have bird neighbors.



THE CRESTED FLYCATCHER AND A BERLEPSCH HOUSE

The Berlepsch house was made so one could raise the top, lid-fashion, and clean it when necessary. It was mounted about twelve feet high on a brook

willow that stood aslant in the ravine; and it had been intended for woodpeckers. The crested flycatchers are brown birds with gray upper breast and yellow below. Their headfeathers are always ruffed, which gives the appearance of a crest.

The flycatchers were flying back and forth continually with all sorts of prey. The brown bugs called "Canadian soldiers" were numerous that day and were easy to catch. These parent birds evidently had a large family, judging from the amount of food they delivered.

Mr. Flycatcher had a loud, explosive whistle. It sounded as if he were saying:

"Wha–
a–
at ?"

The young could be heard giving the same whistle, but much more softly, and somewhat long drawn out:

"Wha–
a–
a–
at?"

After our visit with the flycatchers we returned to the waxwings. Waxwings are brown and about the size of bluebirds. On the back of the head they have a tuft. A black line extends across the bill, and

around the side of the head. The front is yellowish-gray and the tail edged with yellow. The name, waxwing, is due to a shiny red patch on their wings. The fact that these waxwings are very fond of cedar berries must be what has given them also the name of cedar bird. The nest was made of twigs, strings, and various kinds of fiber. The boy said that a few weeks ago he had cut his dog's hair and left it lying on the lawn: that these waxwings then came and carried every bit of it to their nest.

While near the birds I hummed the bird song again, to let them know that the same persons were there that had visited them before. The mother bird was looking straight at us and sitting perfectly still all the while. The boy said he believed the song did help to keep her quiet.

On a cornice of the front porch a phœbe had made two nests, one last year and one this. Both nests were now empty. I said I hoped that a phœbe would come to live on our porch next year.

"You can have this one," answered the boy; and added, "I have to wash off the porch every day while Phœbe is nesting: she scatters so much mud."

As for me, I would gladly clean off our porch several times a day if a phœbe would nest here and sing as sweetly, "Phœbe, phœbe," as I heard that one sing. Sometimes I noticed a slight trill in the second syllable of her song, like "Phœbery." She

sang "Phœbe" with the inflection generally downward; but when she trilled it, "Phœbery," the inflection was always upwards:

"Phœ–
be–
ry."

KITTY WATCHING FOR MICE

"Pee–
e–
a–
wee–
e–
e–
e–
ee"

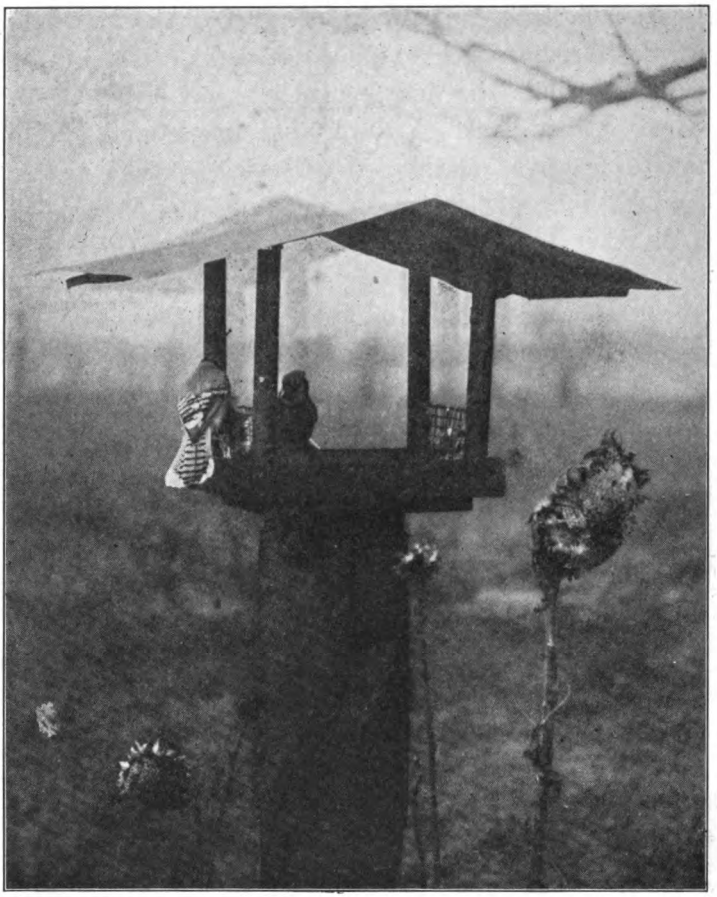
came up from the ravine, clear as a strain from a flute. On my way home I saw the pewee on a fence picket. Every little while he flew after an insect,

then back to a picket. As I walked slowly along, he flew from picket to picket ahead of me, until I came to where the houses on the street begin again. Then he flew back. I think that pewee and phœbe must be some relation, they look so nearly alike. And both sing their own names.

Another bird who sings his name is Bob White, the quail. "Bob *White*!" came ringing across the meadow every little while. The boy could whistle it exactly the same as the bird, and they answered each other back and forth. Bob White was on a fence post, — a large brown bird with a stubby tail.

On Thanksgiving Day I was up at the farm again, and I saw a shelter which the boy had made for the winter comfort of Bob White, and other birds who wished to share it. It was tent-like, made out of cornstalks, the inside filled with pea vines, bean vines, morning-glory vines, and several sheaves of oats. Kitty was watching beside the shelter, — for mice, the boy explained!

The new food house was being visited by bluejays, who nibbled at the suet. A smaller feedery on a tree had corn in a tray and suet in a wire pocket. This feedery was much liked by downies, and small gray birds with white on lower front and tail — juncos. Juncos came in flocks of a dozen or more, and twittered, "Tut, tut, tut," to each other and to us, in sociable fashion. They preferred to pick up the scatterings of chickfeed on the ground, rather than perch



THE NEW FOOD HOUSE WAS VISITED BY BLUEJAYS

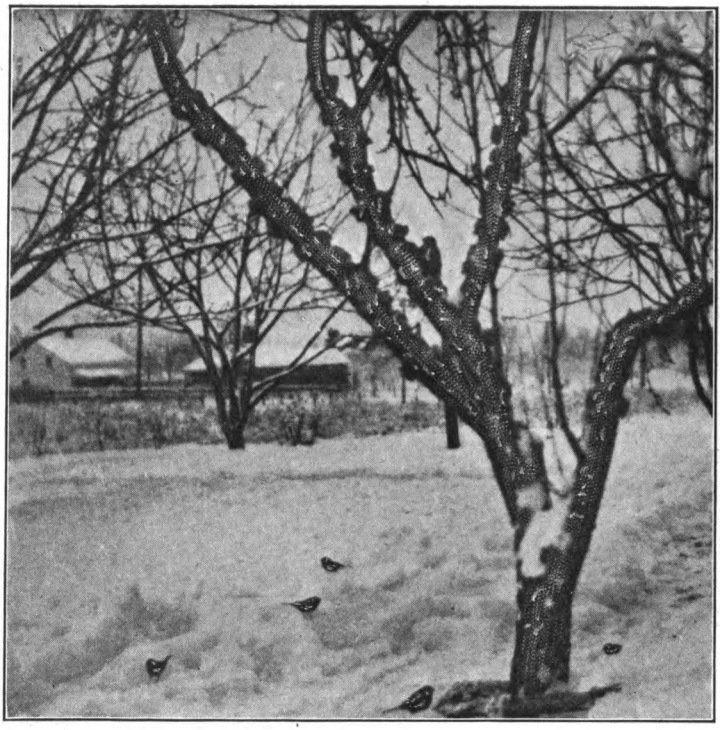
on the tray. Both of these food stations were protected with tin sheeting to keep the squirrel from eating the birds' food. This visit at the boy's home made

me wish more than ever that some day I, too, might live on a farm.

On that Thanksgiving Day I had quite a surprise. Some dogs came barking from the ravine. Before them ran a rabbit just as fast as he could. They were the dogs that had so often chased Bunny, and this rabbit looked so much like Bunny, that I felt sure it was he.

"There's my rabbit," said the boy, as he went to chase the dogs away. I was glad to know that Bunny had such a nice home, and that the boy was a big brother to him also.

A FEEDERY MUCH LIKED BY DOWNY



A TREE TRIMMED WITH PEANUTS FOR THE BIRDS

XI
THE CARDINALS

HAVING often seen cardinals feed in poultry yards with chickens, I again started to scatter chickfeed, hoping to attract those beautiful birds to my house. *Chickfeed* is finer than *chickenfeed*, and I believe the birds like it better.

Every winter I trimmed up an old tree with peanuts for the birds' Christmas, and always after a snow-

storm I tramped the snow down; then scattered the feed on it, with buckwheat and sunflower seeds added.

At first only nuthatches, chickadees, and juncos came to my lunches on the snow. One stormy day a cardinal ventured into our front yard; but he did not go near the chickfeed. Several juncos were there, and maybe he wanted to be generous and leave it all to the smaller birds.

He kept coming nearer to the house. At last he flew pell-mell into our porch. It seemed as if the wind had blown him in. On a little shelf behind the windshield he alighted and stayed.

After a while another bird flew to the little shelf. I hadn't noticed this bird before, my attention being taken up with the cardinal. This second bird was reddish green. In my little bird guide I had seen pictures of the two cardinals, so I knew that she was the red one's mate.

The cardinal pecked at her when she went to his side, and the meek little bird just clung to the shelf. The next day I made a shelf for her just below his.

At dusk the cardinals returned, silently, even stealthily, as though they thought it unwise to publish their presence. Again he was a little ahead of her, and he flew to the new shelf. She alighted on the edge of the upper one. After a while she tripped a little farther in, to a more comfortable place. When she was settled, he went to her shelf and snuggled down beside her. Maybe he was sorry that he had

acted so selfishly the day before. I never saw him peck at her again.

Every stormy day that winter the cardinals came to our porch at evening. They became so confiding after a week or so that he usually announced their arrival with a few low hissing notes, something like "Tset, tset, tset!" Sometimes he would perch on the upper shelf, sometimes on the lower. Mrs. Cardinal was a peace-loving bird. She always came last, and took the empty shelf. Usually he would change so as to sit beside her. They were always gone in the morning, no matter how early I came out; and when they came in the evening it was usually dusk. So I never got a picture of my cardinals on the shelves.

Mr. Cardinal finally got so he sometimes came to the lunch on the snow; but his favorite feedery was a tray in my neighbor's yard, which I kept supplied with shelled peanuts and shelled corn. The English sparrows could not manage these large kernels, so the cardinals had this feedery to themselves. This may be the reason why they preferred it to the one on the ground.

But the cardinals must have procured much of their food elsewhere, for they came only about once in three or four hours to get a dainty at the tray. Strange to say they never came together. Always he came first and ate a while, then sometimes she would come, too. It seemed as if she let him come

THE CARDINAL'S FAVORITE FEEDERY

first, then, seeing that he stayed, she took it for granted that all was well.

In March the cardinals stopped sleeping on the porch. About that time I began to hear almost daily a new song. It sounded like,

"D e a r gilly gilly gilly gilly!"

Immediately after it there would be a loose twitter: "Chuk-chuk-chuk-chuk,"— so soft and low, it seemed it must be very near. Usually it brought another song from the cardinal, and presently he would appear with a morsel for Mrs. Cardinal, who had a favorite perch in our little pear tree. I soon learned that the twitter was her response to his call. The winsome sight of seeing him feed her repaid me for all the money I spent for peanuts at thirteen cents the pound.

The pair began now to frequent the ravine more than usual. On its edge lay a log from which the outer bark had been removed. Here the cardinals were often to be seen, peeling and tearing off strips of wood-fiber, which they bore away in long flowing streamers.

One morning Mrs. Cotton came in. "Here is news for you," she said. "The red bird and a greenish bird are making a nest in my syringa bush."

The birds went on with their nesting for several days. Then Mrs. Cotton came over again, looking sad. The birds were carrying away all their nesting material, she said. They had probably seen the cat, had become alarmed for the safety of their home, and so changed its location.

The cardinal had several songs. One was:

"Whit whit d e a r d e a r whoit whoit whoit"

Another was just plain: t t"
i i
o o
h h
"W w sung from three to ten times in succession. Sometimes, when Mrs. Cardinal did not respond promptly, he "chuk"-ed, himself, in imitation of her notes.

In late August I found the cardinals' deserted nest in an evergreen on the ravine's edge. It was made almost entirely of this stringy wood-fiber, lined with fine rootlets, and interwoven with many leaves.

I never saw but two baby cardinals of this brood. They were brownish birds, and they had the red bill of the parents.

After August I saw nothing more of their mother. I have suspected that a boy down the street was to blame; his favorite plaything was an air-gun, and he had been caught shooting a brown thrasher shortly before. It seems to me the laws protecting song-birds ought to be taught in every school, and that children should be obliged to know that shooting song-birds or their young, or spoiling or stealing their eggs or nest, is a crime punishable by fine or imprisonment, or both.

Father Cardinal was seen tending the young faithfully until October. Then he suddenly turned on them. Whenever they followed him after that he drove them from him. The young found peanuts

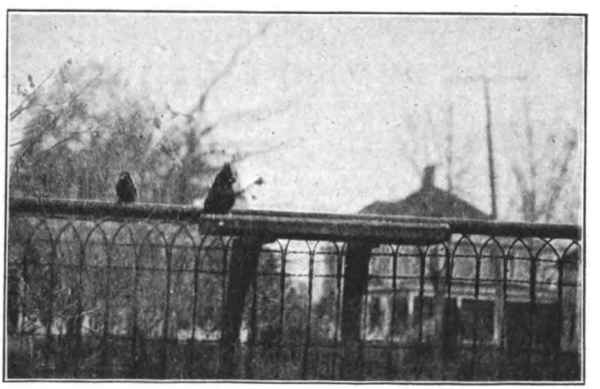
which I had chopped and scattered on the ground for them. But whenever Father found the young birds eating these nuts, he chased them away. Once a baby cardinal found a whole peanut. He bravely ventured to eat it, and in the attempt got the shell partly open. He was just picking a nut out, when his brother tried to snatch it from him. A struggle followed, during which the shell broke in two, and each contestant got a kernel. In November the young cardinals disappeared.

Father Cardinal's persecution of his motherless children seemed unnatural, not to say cruel. Can it be that he tried thus to compel his young to seek their natural food, rather than to subsist on dainties furnished? Did he want to encourage them to become self-reliant and useful? Only on this theory can I account for his conduct.

Our cardinal was a widower for some weeks longer. Only a few times during that mild winter did he come to sleep on our porch, and on those occasions he came alone. Then a lady cardinal appeared, and she followed him persistently. But he wholly ignored her. Finally she began to carry food to him and to feed him. Whether this be a last resort of wooing in birddom, or not, I do not know. Anyhow, Mr. Cardinal relented. The next thing, he was seen to feed her whom he had treated so coolly. This was a pretty sure sign that the two had come to an understanding. Again the old log by the

ravine was being visited for nesting material. Again all his songs rang out, and he added a new one. It seemed as if he were singing over and over:

"Come come Come here here here here here"



ALWAYS MR. CARDINAL CAME FIRST AND ATE A WHILE; THEN SHE WOULD FOLLOW

SONG SPARROW

XII

MY BIRD FAMILY

A GREAT big family — that's what my bird neighbors are to me. This large family is made up of smaller families. Let me set them all down in a row: There are the bluebirds, meadowlarks, killdeers, song sparrows, robins, purple martins, goldfinches, wrens, orioles, thrashers, thrushes, waxwings, flycatchers, pewee, phœbe, and the redheaded woodpecker. Oh, there is one more. I would by no means slight the humble chimney swift. When I hear that "Gitse gitse" twitter, then I know that they, too, have come. From early March when the first bluebird arrives, until late May when pewee comes, I am like a mother who waits at evening, unsatisfied until all her children are in for the night. When I hear the call of the latest comer, the sweet-voiced pewee, then I know that my absent ones have all returned.

Add to these the Bob Whites, the cardinals, blue-

jays, and flickers, who stay the year round, and the chickadees, nuthatches, downy and hairy woodpeckers, and juncos, who come in autumn to spend the winter, and you have my bird family, a wonderful family, of musicians, of workmen, of homemakers — fathers and mothers and children.

To me the ways of birds are more entertaining than the best play I have ever attended. They enact real life, not make-believes. Then, too, what music can be compared to the sunrise and sunset concerts of birds in springtime and in early summer? To know each singer by name adds much to the enjoyment.

The ways of birds are also wonderful, past finding out. Who can explain how they make their nests so pretty, when the only tools they have are beak and feet? Then, how gingerly they hide their nests, some with dainty curtains of leaves, others by blending colors! To find a bird's nest always fills me with reverence. It is a little home, a sacred place to its owners. It shall be sacred to me. The mother-wit and father-wisdom that birds show in rearing their young and in protecting them from harm makes me believe that they do think and plan and reason out things much as we human beings do. The most wonderful thing about birds is the long journey that so many of them make every year, generally with several babies only a few months old in the family.

It has been proved that birds will return year after year to the same orchard, garden, yard, or porch. I

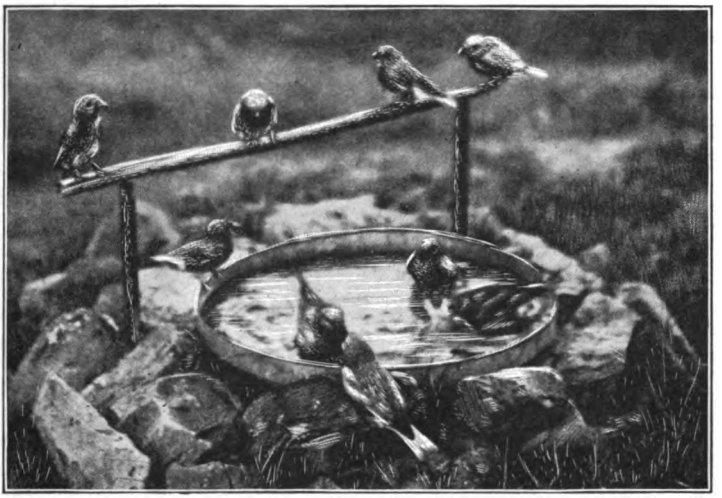
know my birds by their actions. I do not need to tie bands on their legs to know them. When they return they visit all their familiar haunts, not cautiously as a stranger would, but boldly, and with the joyousness of those who have returned home after a long absence. They call to me as if they would say: "Here we are again! Are you still here, too?"

Then what curiosity they display when they find a new bath! How they fly over and around it, trying to satisfy themselves that it is a safe place to alight! What joy they express by their splashing!

It was while taking her bath that Mother Oriole was caught one day by the camera. Most wonderful to tell, her own babies whom she often brought with her took this picture. How did they do it? They tried to perch on the thread leading from the camera over to the house, where I sat waiting for Mrs. Oriole to come out of the water before taking her picture. The thread was not strong enough to hold the young birds. They went down with it, and in so doing snapped the spring which operated the shutter. This took the picture of Mother Oriole in the bath.

Those of my bird family who inhabit houses are sure every spring to find either some new houses, or their old ones cleaned and repaired.

I always keep two houses up for bluebirds, and several for wrens. It is pleasant to watch them make their choice, and after a fledging they can set up housekeeping again in the same house, or take



MOTHER ORIOLE IN THE BATH

another. My experience has been that birds become attached to a house where they have safely fledged a brood, and if it is promptly cleaned they will return to it, rather than try a new one. But I have known instances where a pair began a second nesting before the young of their first brood were fledged. In such a case an extra house is convenient.

My bluebird house is five by seven inches,[1] and is so shaped as to afford depth. Sufficient height is

[1] These dimensions have been accepted and approved not only by my own bluebird neighbors, but by a bluebird pair reported in *Bird Lore* for July-August, 1916, as having nested in a cemetery, in an earthen jar that lay upon its side on a grave. The report goes: "The jar measured five inches across the bottom and about seven inches in length." There it is: five by seven!

secured by means of a gable roof; and a half-inch hole immediately under the roof affords ventilation.

The bluebird covers the floor of her house with grasses to the depth of about an inch and a half. Away back against the rear wall she makes the little hollow in which she lays her eggs. I make her entrance one inch and a half in diameter, and just below the middle front. While brooding she can look outside, and this affords her some diversion during that monotonous task. This certainly seemed to be what one bluebird aimed at who nested in Mrs. Daily's wren house. The wad of grasses in that house reached clear up to the entrance, which was about four inches above the floor. Apparently this bird had tried to build her nest high enough so she could look outside.

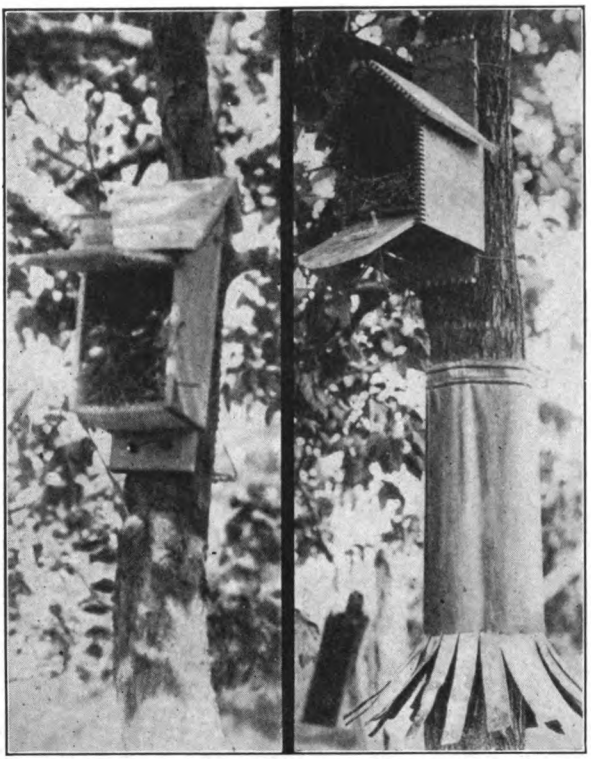
Wrens always make a litter several inches high of twigs and other materials. In this litter they embed their nest of fine grasses and feathers. Hence I conclude that they want their entrance several inches above the floor, so that, on going in, they can walk over the litter and do not have to grope through it. Being small birds they need only a small house. After years of experimenting I have settled on five inches by seven for wrens also, but their house is so shaped as to afford height. The sides run up at the back to twelve inches. A half-inch hole high on each side affords ventilation. I make the entrance one inch and an eighth in diameter, just too small

for the English sparrow, but large enough to serve some other small bird should no wrens come. A smaller entrance makes it difficult for wrens to get in their bulky nesting materials. My wrens raised three broods in their little house in the pear tree last summer.

A friend of mine bought a wren house which has a low entrance. Some wrens nested in it. One day Father Wren was very much excited, but no one could understand what was the trouble. The next day, believing that the wrens had fledged their young, my friend ordered the house to be cleaned. To her horror she found Mother Wren wedged in among the nesting, dead. The babies were dead in their nest. Evidently their increasing weight had settled the nesting materials so the mother could not get out any more and neither could Father Wren go in. Let this be a warning to all who make wren houses, to make the entrance several inches above the floor!

My houses for wrens and bluebirds are so made that they can be easily opened after use, and cleaned. The front on the wren house can be raised, that on the bluebird house lowered. By means of a screw eye, the front is securely closed while the house is in use.

Of late I have also used an open shelter. It consists of a tray about five inches square, roofed over, and serves two purposes. For winter use I fasten a small wire pocket on it, into which I put beef suet.



SO MADE THAT THEY CAN BE EASILY OPENED AFTER USE AND CLEANED

Then I mount this shelter about five feet high on a tree. Around the trunk I fasten strings of peanuts; in the tray I keep shelled corn, of which cardinals are especially fond. The English sparrow does not care for the suet, and as he cannot manage the corn nor the peanuts, this feedery attracts only desirable

birds. In March I remove the wire pocket, and mount the shelter a few feet higher, to serve as a nest shelter for robins. The roof will ward off heavy rains, which destroy so many robin's nests. A similar shelter, if fastened in the shade on a wall, might attract phœbes.

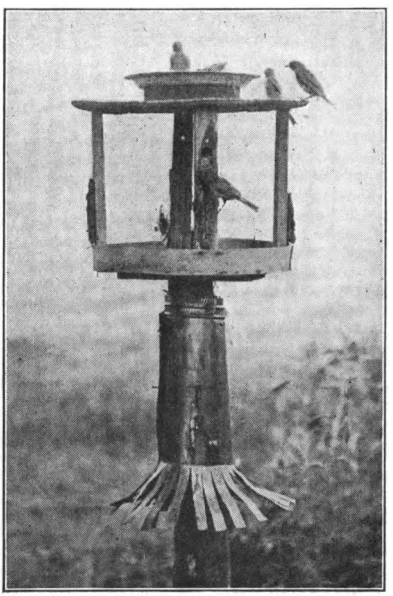
When one starts out to make bird houses he should decide first of all what birds he wishes to attract by means of them. Booklets containing drawings and instructions for making houses for many kinds of house-nesting birds can be had free by addressing a postcard to the Biological Survey, Washington, D.C.

Whoever tries to attract birds should also protect them from storms, from their natural enemies, and from meddlesome people. Birds will sometimes reject a good house because it is not properly mounted, or because the location is objectionable. The boy and I visited a park lately where about a hundred bird houses had been put up, and but a few were said to be occupied. These houses were so constructed that, by turning a cleat underneath, the floor could be pulled down and out. If occupied, opening them in this way might have disturbed the nest. We visited twenty-five of these houses. All except two were mounted so low that the boy could reach them, some with ease, and turn those cleats. Only the two which he could not reach were occupied.

Some people have recommended tin cans as nest boxes for small birds. I have tried the tin can, care-

fully painted and placed in the shade. But, even with these precautions, I would discourage its use. People are so apt to forget about placing it in the shade! I have seen birds' nests in tin cans with little skeletons embedded in them, the birds having been smothered by the intense heat which metal will store.

Enough wooden boxes are discarded by grocers, druggists, and other merchants to stock the country every year with bird houses. If our fathers and mothers will encourage the making of these discards into bird houses, shelters, and feederies, it will mark a step forward in bird protection.



FOOD HOUSE, MADE OUT OF WASTE MATERIALS

Food houses should be protected so that other animals cannot mount and monopolize them, keeping the birds at bay. The red squirrel will do this unless the food tray is at least five feet above ground and the post well sheathed in tin.

My newest food house has the lid of a cheese box as tray and the top of a sugar barrel as roof. This flat surface is a

handy place for a basin of water. In each of the four pillars supporting the roof is a hole, to be stuffed with suet, cheese, peanut butter, etc. My grocer saves the drippings from his peanut grinder for my birds, so there is no extravagance in giving them this dainty. Song sparrows and bluebirds like it as well as the woodpeckers. On the side of the tray I tack nesting material. So this food house, made out of waste materials, serves several uses. The boy liked it so well he patterned one after it for his birds.

Every autumn a lisping, whispered, dreamy bird song coming from some low elevation has puzzled me. The bird looked like the song sparrow, but this soft warble was so different from his spirited spring and summer songs that I could not believe my eyes. After repeated autumn entries in my notebook, "I see his heavy breastspot heave and swell, and his tail quiver as the song sparrow's always does when he sings," I was gratified to find my findings confirmed by another observer.[1] The singer was the song sparrow.

But to return to my bird family.

From the time the first birds arrive in the spring until they leave again, my notebook and my field glasses are my constant companions. Now here are some little nature secrets. My notebook is a green one. I have to buy the paper in large sheets of the wholesaler, and make the books myself. A green

[1] Chas. R. Wallace of Delaware, Ohio, in *Bird Lore*, March-April, 1915, p. 128.

notebook on my lap does not make such a striking patch on the landscape as a white one would. The birds do not notice it so readily. Then, whenever I am out "birding," except in winter, I wear green clothes. When taking pictures I use green focusing cloths instead of the usual black ones. These things are great helps in bird study.

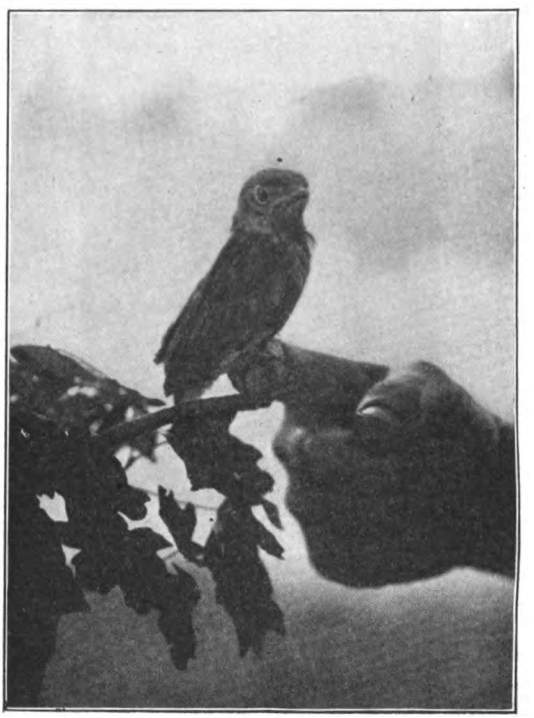
There now! For the first time in this book I have used the word "study" in connection with birds. Some people think they must study volumes on ornithology before they can enjoy birds. Nothing could be farther from the truth.

Even the little tot in a family may have an interest in his bird neighbors that will provide him wholesome pastime. I know one who, ever since he could walk well, has faithfully kept the birds' bath in the yard supplied with fresh water, and who saves all the table scraps for them. He wears an Audubon button and says he is "the birdies' policeman."

Love, look, listen, appreciate; let these be your watchwords. Just love the birds. Look, as long as they remain in sight. Observe their ways and their appearance. Listen to their songs. Try to know your immediate bird neighbors by appearance, name, and song. Do them a kindness when possible. This will lead up to recognition of birds, which creates a desire for study of them. The rest will follow. You will begin to record observations. You will *wish* for field glasses and bird books. You will *want* to spend

your holidays and your vacations where you can see birds. Before you realize it you will be one of those happiest of individuals, a nature lover, as all true bird lovers are. It cannot be otherwise, because the birds will draw you out to nature at all times, and make you see her in all her moods.

Then some day, when everybody loves birds, perhaps they will no longer hide their nests, and may even fly to us, instead of away from us.



THE BIRDIES' POLICEMAN

GLOSSARY

apartment, room, living quarters.
Audubon, John James Audubon, noted student of bird life.
authority, one who has commanding knowledge of a subject.

berating, scolding.
Berlepsch, family name of a nobleman who was noted for his kindness to birds.
bewildered, confused.
birdling, a baby bird.
blending, mixing.
bluster, play the bully.
bungalow, a one-story house.

chickfeed, a mixture of cracked grain.
clamber, climb awkwardly.
commotion, disturbance.
conjecture, guess, suppose.
convenient, suitable, handy.
cornice, the fancy topmost part of a wall, usually overhanging.
courageous, full of courage, brave.
craw, the crop; part of a bird's throat through which his food passes.
crouching, lying flat or very close to the ground.

delving, making holes by digging; working hard.
demonstration, a show.
distinguished, notable, unusually fine.
distressed, troubled.

entice, coax, persuade.
evidently, plainly, clearly.

fetch, go and bring back.
fledge, (*a bird*) to reach the age when its feathers are grown, so that it can fly; to care for a bird until it reaches that age.
fledgling, young bird, just out of the nest.
forage, seek for food.
frantic, wild with fear or alarm, or even with joy.

genial, friendly, kindly.
gingerly, cautiously, carefully.
goal, the place one is going to.
guttural, throaty, hoarse.

hepatica, a spring flower, also called *liverwort*.

inflection, change in the pitch of the voice.
insanitary, unhealthful.
inspect, examine, look into.
intruder, a meddler, outsider, stranger.

larvæ, caterpillars, grubs.
lore, knowledge.

mandible, a jaw, upper or lower, especially of a beak or bill.
manicure stick, a small smooth stick of orange wood, used in caring for the finger nails.
matins, morning songs.
menace, danger.
minor tone, low, soft, sad tone.
minstrel, a traveling musician.
monopolize, to own, to possess alone.
monotonous, tiresome.
morsel, a mouthful, a bit of food.

Neufchâtel, a city in Switzerland famed for the manufacture of cheeses.
nimble, active.
notional, full of notions, whimsical, "cranky."

obedient, willing to obey, dutiful.
odious, disagreeable, unpopular, offensive.
opportunity, chance.
ornithology, the scientific study of birds.

pastime, amusement, play.
pergola, garden house.
persecution, pursuit with the object of punishing or hurting.
pilfering, thieving.
pleading, begging.
plumage, feathers.
preen, smooth down feathers with the beak.
premises, piece of land belonging to somebody.
primitive, old-fashioned.
prospect, view, outlook, scene.
provisions, food.

rasping, harsh, grating.
ravine, small valley made by running water.
relent, yield, give in, forgive.
revenge, return of evil for evil.
revive, bring back to life.
rippling, moving up and down or back and forth, like water.
rung, step (*of a ladder*).

sanctuary, refuge, shelter, place of protection.
serene, quiet, calm.
sibilant, high, piercing, hissing notes.

soot, a fine black powder left by smoke on the inside of chimneys.
stealthily, secretly.
subdued, overcome, quieted.
subsist, live on.
suet, beef fat.
syringa bush, an ornamental shrub with very sweet white blossoms.

tapering, narrowing to a point.
temporary, for a short time.
tenants, dwellers, occupants.
tethered, tied, leashed, hitched to a post or weight.
tinker, work at anything in an unskilled way.
tin-sheathed, enclosed in tin sheeting.
tolerate, put up with, endure.
transfer, remove.
trellis, lattice work for vines to grow on.
trilling, quavering (*said of singing*).

underbrush, small trees and bushes growing under large trees in a wood.

ventilation, letting in fresh air.
venture, risk, attempt.
vespers, evening songs.
vigilant, watchful.
vise, clamp.

winsome, charming, pleasing.

yodeling, warbling, singing with frequent changes from high to low and low to high.

DIRECTIONS FOR MAKING BIRD HOUSES

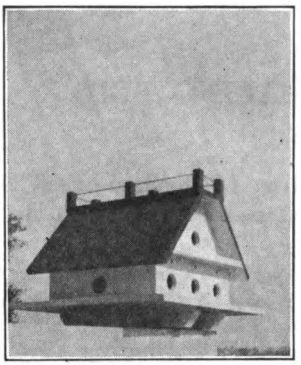
The figures given below are based on ½″ lumber, except the backs of wren and bluebird houses and the base and roof of martin house, which should be ⅞″ thick.

	Back	*Sides*	*Front*	*Floor*	*Roof*	*Entrance*	*Air Hole*
Bluebird house	4″x10″	5″x7″	4″x5″ and 7″	4″x5½″	5″x8″ 4½″x8″ gable	1½″ dia. in middle front	½″ dia. in peak of gable
Wren house	4″x14″	5″x7″ and 12″	4″x7″	3½″x4″	7″x8″ sloping	1½″ dia. 5″ above floor	½″ dia. in each peak

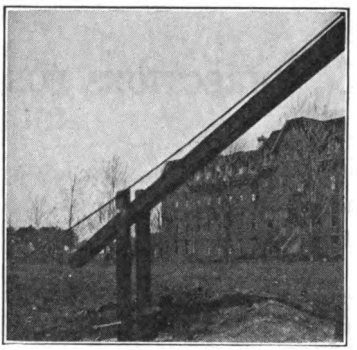
For picture of bluebird house, see inside back cover; for picture of wren house, see page 39. The sides of both houses are nailed to the edges of the back in such a way as to let the back project below, about one inch.

In the bluebird house, the upper edges of the sides should be beveled to fit the slope of the roof. The front of this house is hinged upon a one-inch brad driven in, on each side, a half-inch above the lower corner. To enable the front to swing downward, as shown on page 116, the floor must be fastened in place three-fourths of an inch above the lower edge of the sides. Before nailing on the roof, see that the front swings easily. Bore half-inch holes in the projecting back below and above, for wire to run through to strap the house in place. Add a perch of doweling a half inch below the entrance. See figure on inside back cover.

The wren house is also provided with a swinging front, hinged like that of the bluebird house, but with the brads placed one inch from the upper corners so that it opens up instead of down. This is shown on page 116. The upper part of the back of wren house is planed flush with the sloping sides, and the roof is planed flush with the back. The air holes on each side will also serve for wire



THE FINISHED MARTIN HOUSE



RAISING THE MARTIN HOUSE

to run through. Other holes for this purpose should be bored in the projecting back at the bottom. Again see figure on page 116. Add a perch of doweling a half inch below the entrance.

The holes in the backs should be about an inch apart on the surface and should be bored at an angle, so as to lead the wire snugly around the trunk. When the houses are put up for use, the front of each is securely closed by means of a screw eye on the side which can be easily removed for the purpose of cleaning. Bluebird and wren houses should be in shade or part shade, about ten feet above ground, and mounted so that the upper part tilts slightly forward.

	Base	*Box for lower story*	*Rooms*	*Entrances*	*Pole*	*2 Posts*
Martin house	30″x30″	7″x20″x20″	6″x6″x7″	2½″ dia. 1″ above floor	4″x6″x16′	4″x6″x11′

In the center of the base a hole 4″ × 6″ is cut to fit the pole upon which the house is to be mounted. Two cleats are nailed underneath the base, crosswise of the boards and plumb with either side of the 4″ × 6″ hole. The box for the lower story is partitioned into nine compartments, each 6″ square and 7″ high. This gives eight outside rooms and a central space through which the pole may go. In order to provide ventilation near the ceiling,

make the partitions only 6½″ high. They need not be nailed, but may be dovetailed, like partitions in an egg box.

To make the house so it can be easily opened, for cleaning or to rout the English sparrows, fasten the box for lower story in the center of the base by means of screw eyes and hooks, two on a side. The projecting part of the base will form a 5″-wide porch all around, a convenience which martins greatly enjoy. The ceiling is allowed to project 2½″ at the front and back to form porches for the upper rooms. Add a gable ample enough to afford at each end a room 6″ wide and 7″ high. In the upper end of the partition between these two rooms, cut a hole 2½″ in diameter. The reason for this is stated on page 88, paragraph 2. The slanting roof should project 2½″ all around. Finish it with a flat top as shown in the first cut on page 128. Add posts 1″ × 1″ × 4″ on which to staple wire or doweling as perches for the martins. Fasten these little posts to the flat roof by screws from beneath, before nailing it to the house.

Now fit the pole to the central space and screw it securely to the cleats under the base, and the pole with the house on it is ready to be set up. The martin house should be at least fifty feet away from a tree or building, and fifteen feet above ground.

To mount the martin house so it can be easily let down to be cleaned or to rout the English sparrows, place the two posts four inches apart and have them at least six feet high. Set the pole holding the martin house between them and secure it with two bolts about four feet apart, the lower bolt being 1½ feet from the ground. To lower the house, remove the lower bolt and tilt the pole, as shown in the second cut on page 128. The posts should be creosoted and sunk five feet in cement.

This cut shows a block and tackle being used to tilt the pole. A further precaution against having the house crash to the ground would be a shears made of rough two by four scantling, which can be obtained in twelve-foot lengths. In making the shears, bolt the scantlings two feet from the top with an ordinary half-inch carriage bolt, and tie the bottoms so the legs will not spread too much.

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