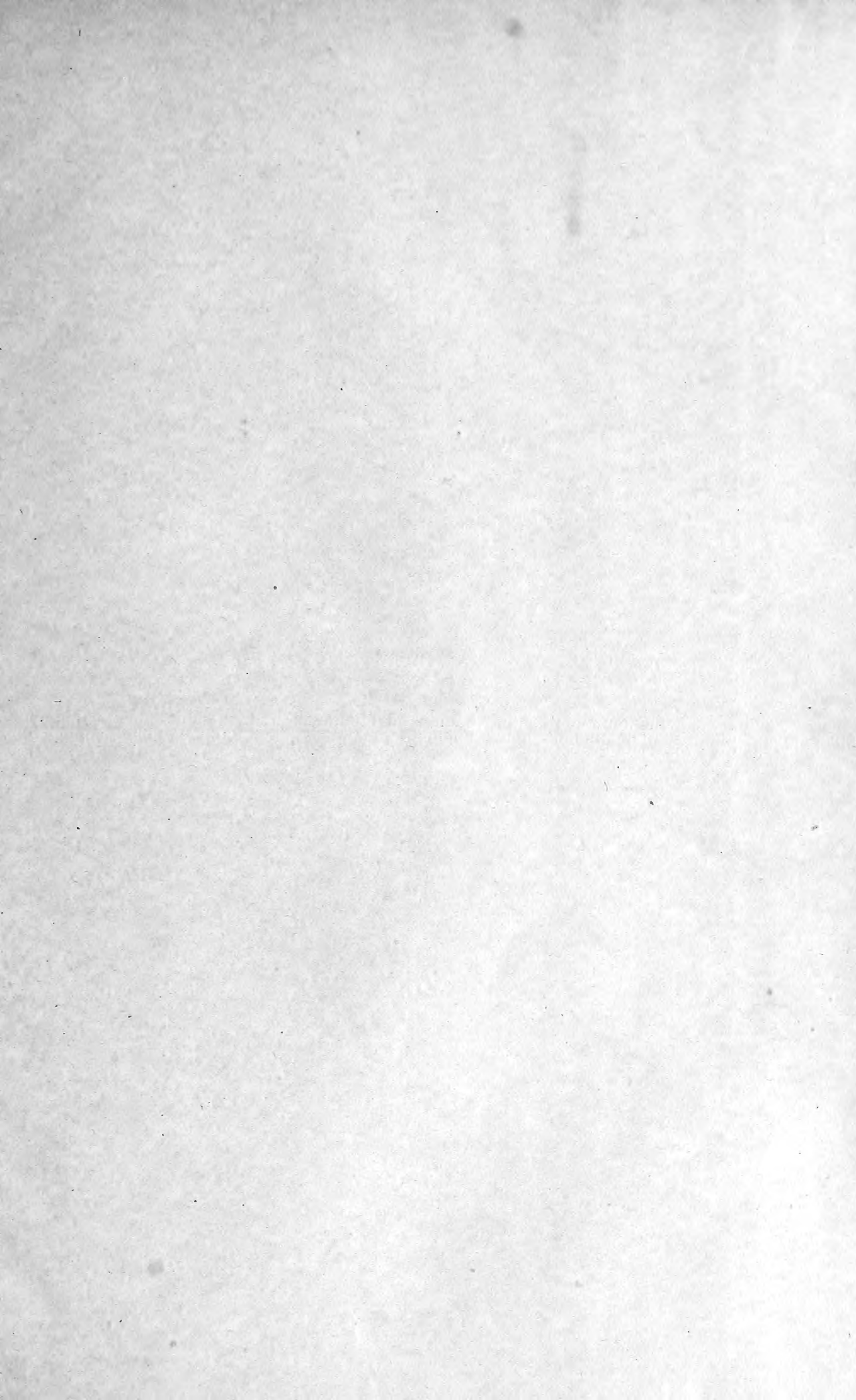


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American Ornithology.

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For the Home and School.

EDITED BY CHESTER A. REED, B. S.

Vol. 3.

WORCESTER, MASS.,
CHAS. K. REED, PUBLISHER,
1903.



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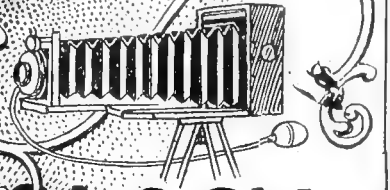
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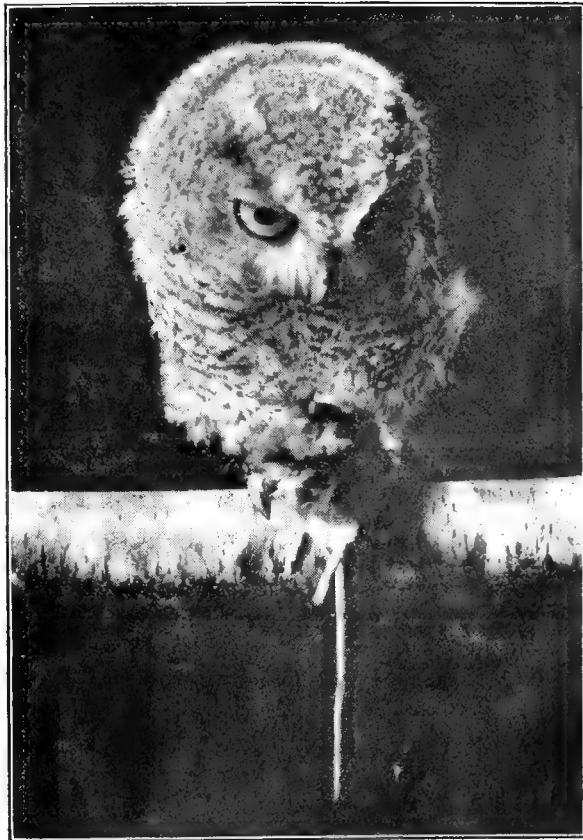
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AMERICAN BIRD MAGAZINE ORNITHOLOGY



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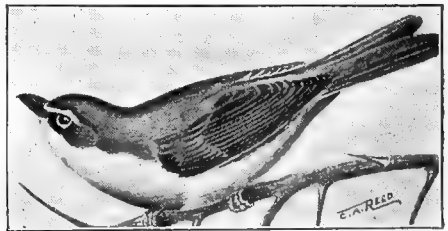
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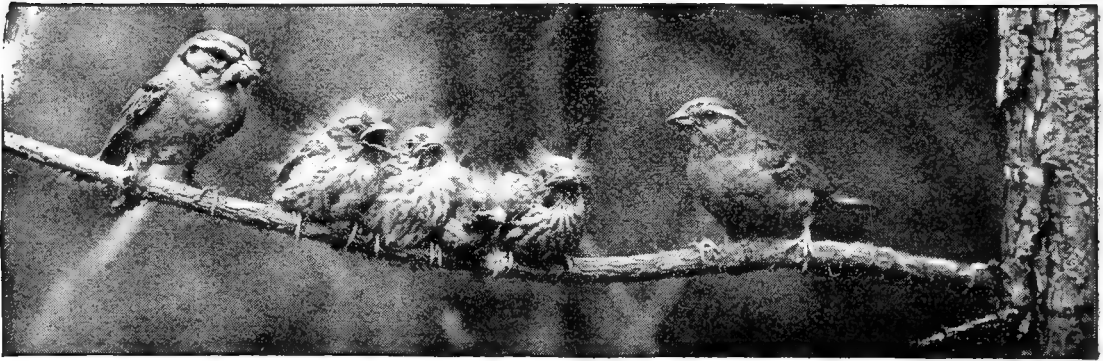
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These Glasses are well made and especially adapted for the use of the bird student as they give about *twice the field vision* of ordinary ones and *magnify nearly four diameters*. The bird in the small circle below is as you would see it with the eye, and in the large circle as seen through these glasses.



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Devoted to Bird Life in North America.



Bird Histories. We shall continue our present policy of presenting the histories of a number of birds each month. As far as possible these will be written by *the* recognized authority concerning each bird. Description, nesting habits, and other interesting habits and traits of character will be accurately given. The birds will be illustrated to the best possible advantage; the egg will be shown natural size; the nest and eggs in natural situation will be shown when obtainable. These will form, serially, a complete history of the birds of North America.

Bird Articles. Vivid, interesting accounts of nature trips will be given by careful observers, and will furnish entertaining as well as instructive literature.

Illustrations. The present high standard of our illustrations will be maintained and we hope to even better them. Our series of PHOTOGRAPHS OF LIVE WILD BIRDS have attracted wide spread attention. For 1903 our series will be BETTER and there will be MORE OF THEM.

Color Charts. As a means for identifying birds, our color charts have been very highly commended by ornithologists all over the country. They will be continued during 1903.

Reviews. We shall give careful reviews of new books devoted to bird life and also to bird articles in the leading magazines. We hope and expect that this feature will be a very beneficial one to our subscribers.

Information. We shall endeavor to answer all queries in regard to birds, bird photography, or photography in general. All subscribers may feel at liberty to ask questions as freely as they wish.

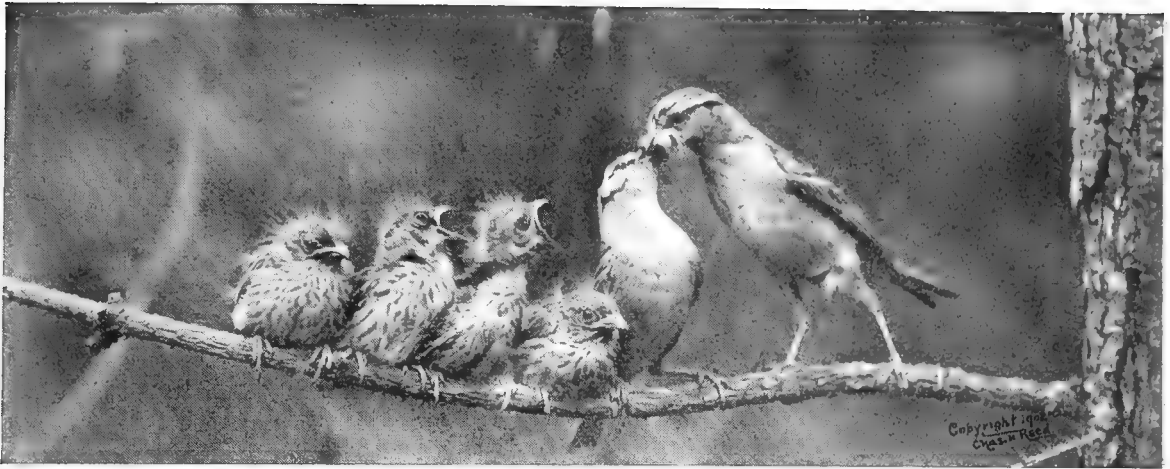
Department for Young Folks. This will still continue to be conducted by Meg Merrythought on the same lines as during the past year. We hope that they may continue to receive enjoyment and profit from it.

The Chippy Family. This photograph is pronounced, by hundreds who are in position to know, to be the best ever taken of an ENTIRE FAMILY of LIVE WILD BIRDS. A colored LIFE-SIZED reproduction of this photograph, on heavy enameled paper 12x20 in., is given to each subscriber during 1903. The small cut at the top of this sheet is a reproduction in miniature of this picture. It represents four young Chipping Sparrows and the two adults. The female, at the right, has just fed three of the little ones, while the male, at the left has just come with a large green worm to feed the other. Remember the original is LIFE-SIZED and colored, making a beautiful picture for framing.

The subscription price of **American Ornithology** is \$1.00 a year, 12 Numbers.

Vol. I, \$1.00 unbound; \$1.50 bound in cloth. Vol. II, \$1.00; unbound; \$1.50 bound in cloth. Vols. I and II, unbound, and subscription for 1903, \$2.50. Vols. I and II, bound, and subscription for 1903, \$3.50.

AMERICAN ORNITHOLOGY, WORCESTER, MASS.



PREPARING BREAKFAST.

This seems to be the most appropriate name for the companion picture to the "Chippy Family." This photograph was taken from the same group of Chipping Sparrows only a few minutes later. We have had this made to correspond in size to the "Chippy Family" and printed in color on the same size paper, 12x20 inches.

In a number of respects, this new engraving is a more interesting one than is the "Chippy Family." The self satisfied appearance of the two end young birds and especially the appealing attitudes of the two middle little fellows will "take" with everyone. The female bird, at the extreme right has just brought an unusually large green worm. The male had just fed the right hand young one and was preparing to leave when she came; she made him take one end of the worm and then while he pulled down, she lifted upward with all her strength until the worm separated. The pieces were then fed to the eager little ones.

These two companion pieces will make a unique addition to the walls of any house. They are more valuable than the creation of any artists imagination; they tell the true story of the every day occurrences in the life of one of our best known and most useful birds.

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VOL. III

JANUARY, 1903.

NO. I.

We regret to learn of the death of Mr. Chester Barlow, at Santa Clara, Cal. As editor of the Condor and an energetic worker in the Cooper Ornithological Club as well as to his many personal friends, his loss will be keenly felt. He was one of the founders of this society and instrumental in bringing it to its present excellent standard. He passed away in the twenty-eighth year of his life.

We are pleased to receive the many congratulations and compliments for our efforts the past year. Unless the unforeseen happens, we expect to show a marked improvement in the coming volume. We trust that our subscribers will do what they can to assist us by their observations.

We notice that nearly all of our subscribers who are returning their magazines to be bound have paid 18 cents or more for postage. These require but 9 cents. The postage rate for the public on returned magazines is one cent for each four ounces. Many stamp clerks appear to be unaware of this rate.

ANOTHER ART PICTURE.

The reproduction from the life photograph which we have been giving as a premium, has been so favorably commended that we have prepared the companion piece. It is called "Preparing Breakfast" and is of the same group of birds. It is fully the equal of the "Chippy Family," in fact nearly everyone considers it better. Read our advertisement on another page in regard to obtaining this picture.



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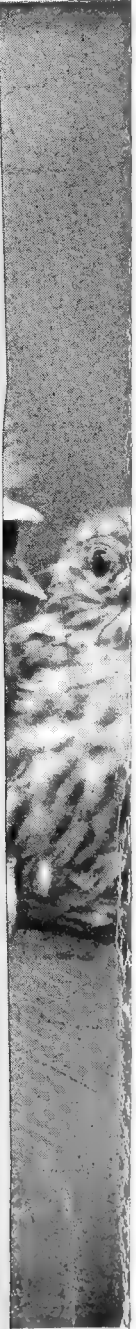
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VOL. III.

JANUARY, 1903.

NO. 1

RUSTY BLACKBIRD.

A. O. U. No. 509.

(*Scolecophagus carolinus*)

RANGE.

Eastern North America, chiefly east of the Plains although occasionally found west to the Rockies, and throughout the Dominion of Canada to Alaska. They breed throughout Canada, but only rarely in the United States and then only in the higher portions of the northern New England States and New York.

DESCRIPTION.

Length, 9.5 in.; extent, 15 in.; tail, 5 in. Eye cream color. Bill and feet black. Adult male in summer—Entirely black with metallic greenish reflections. Female—Smaller than the male. Sooty black with the metallic reflections confined to the wings and tail. Nearly all the feathers of the upper parts edged with a rich rusty brown and the under parts paler. A light line over the eye. In winter, males, females, and young are all very similar in plumage to the summer female.

NEST AND EGGS.



Rusty Blackbirds build large bulky nests, the foundation of which is moss held together with mud and upon this a nest proper of twigs and grasses. They are located at a low elevation from the ground and in a swampy place generally near some small pond. They lay four or five eggs, late in April or early in May. These are of a light blue ground more or less heavily blotched with various shades of brown, these blotches often entirely obscuring the ground color.



Taken with a Bausch and Lomb E. Rapid Univ. Lens.

THE CHIPPY FAMILY.

[CHIPPING SPARROWS.]

Photographed from life by Chester A. Reed.



RUSTY BLACKBIRD.

HABITS.

Rusty Grackles are among the earliest of the migrants who pass through on their way to the breeding grounds. They rarely fly in large flocks as do most of the Blackbirds and Grackles, ten or twelve generally sufficing for each company. These small flocks later subdivide and generally only two or three pairs will remain in the same locality to nest. Bendire says: "Its food during the summer months consists principally of insects of various kinds, such as caterpillars, moths, grass-hoppers, etc., small mollusks, worms, wild berries and small seeds. In winter this species feeds more on grain and may be seen occasionally about barns and stock yards and in corn and rice fields, usually in small flocks by themselves, but sometimes in company with other Blackbirds. Their mode of flight resembles that of the Red-winged Blackbirds, and when feeding, while moving along, the rear-most fly over the others and alight again in the front ranks. Their notes are much more musical than those of the Grackles or other Blackbirds. The ordinary call note sounds like "tchack, tchack," several times repeated; another is like "turulee, turulee," uttered in a clear tone, and varied occasionally with "trallahee, trallahee."

"These birds are very much attached to their summer homes, returning to them from year to year, and rarely more than two or three pairs nest in one locality; in fact they are as often found singly. One egg is deposited each day. Incubation lasts about two weeks and the young are able to leave the nest in about sixteen days. They are mouse colored at first, and are carefully attended to by both parents, who are devoted to them."

GRACKLES.

BY ELIZABETH POLYHEMUS.

Hushed and dreamy was the Indian Summer day—intensely blue, the sky—gorgeous the trees in their dresses of vivid reds and yellows. Suddenly all this was changed. There was a creaking clatter that made one think of old chain buckets, and wind blown, swaying tavern signs, or the shrill squeak of sled runners on a zero morning. The chestnut trees that a moment before were one mass of golden yellow, now looked as though draped in mourning, so thickly were they covered with Blackbirds, "Rusty hinges," the children call them. There must have been a thousand in the flock that had stopped for a lunch of chestnuts on their way south.

They evidently were very hungry and the nuts were large and plentiful so for a time they did nothing but eat. The Blue Jays, usually so



FEMALE RUSTY BLACKBIRD.

pert and noisy, hovered near in speechless wonder, and the gray squirrels came running down the trees, not frightened, only crowded out. Perching themselves on the fences and rocks, they furiously twitched their tails and chattered. No frost or strong blast of wind ever caused the nuts to fly from the burrs as did the busy Grackles; they clattered to the ground like hail. The squirrels, seeing this rushed in and began digging holes, anywhere—everywhere. Carrying the nuts in their mouths they dropped them into the holes and with their fore paws quickly covered them up. As soon as the birds saw what the squirrels were up to, they came down in a body, drove them off, and continued their own feast.

I noticed that they did not hop about, but walked in a grand dignified manner. For hours they loitered around while people curiously and admiringly studied their manners. I had never before heard such chattering, so fast and shrill. It was more like an afternoon tea than anything else. I listened hard but could not understand what it was all about. It may have been pure gossip about the queer people they had seen on their travels or possibly they were electing their officers to take charge of the southern flight. Towards evening they spread their rudder tails by which they seem to steer, and following their leader, flew away.

GANNET.

A. O. U. No. 117.

(*Sula bassana*.)

RANGE.

Found along the coast of the North Atlantic. Breeds from the northern border of the United States northwards. South in winter to the Gulf of Mexico.

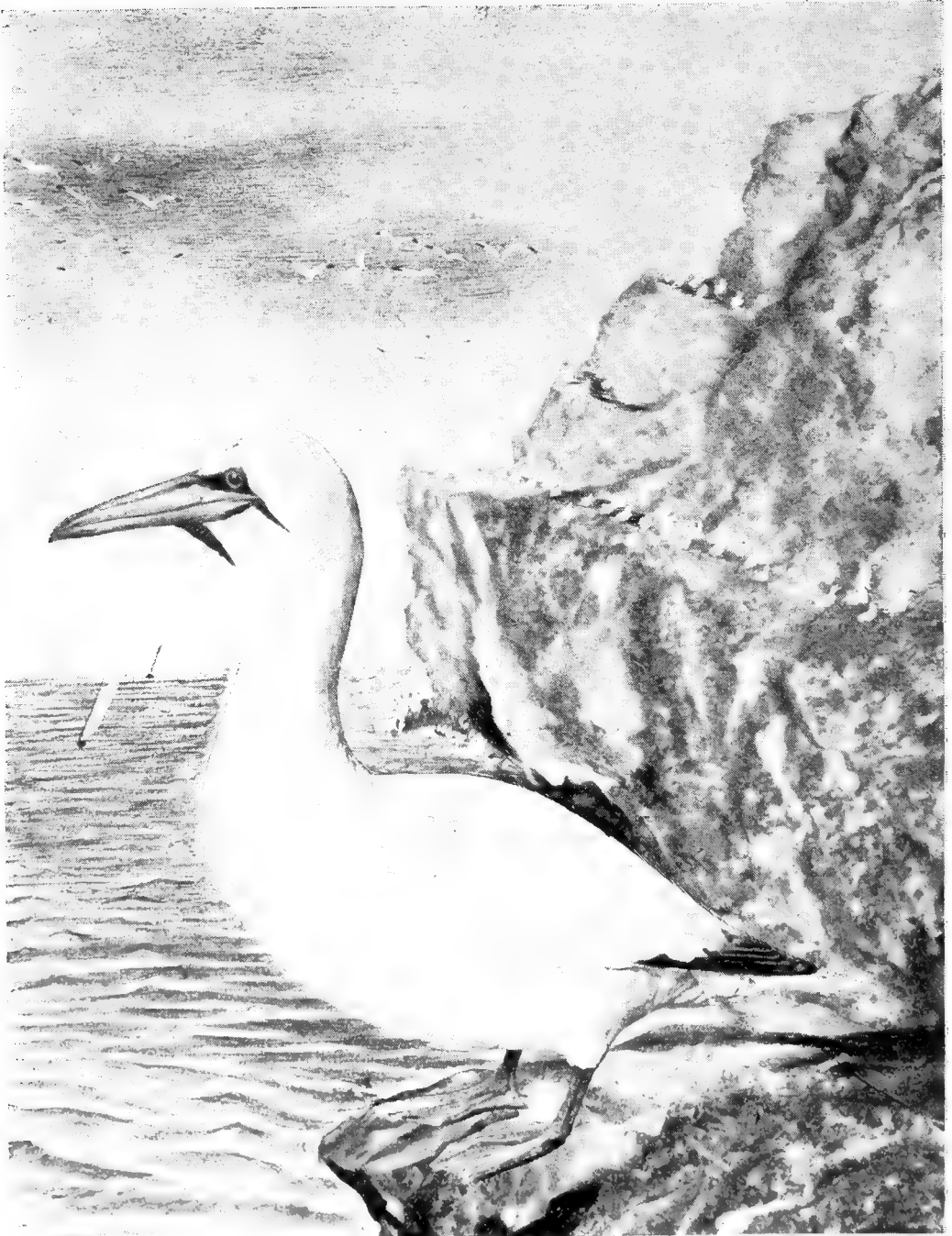
DESCRIPTION.

Length, 36 to 40 in.; extent, about 6 feet; tail 10 in. Bill grayish-blue and about four in. long on the upper part. Eye, white. Feet, gular-sac, and lores, blackish. Entire plumage, white except the primaries which are black. The head is more or less washed with yellowish.

Young—General plumage a dark brown, most of the feathers having a white base thus causing much mottling.

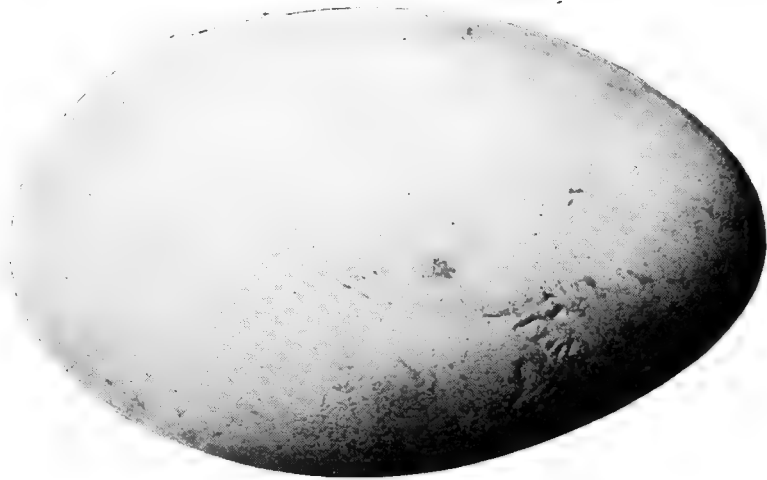
NEST AND EGGS.

Gannets breed in great numbers on many of the high rocky islands of the North Atlantic. One of the best known places on the American coast being the Bird Rocks in the Gulf of St. Lawrence, where there are thousands of them. They build a large nest of seaweed and in this lay a single egg. This is of a pale greenish-blue color and is thickly



GANNET.

covered with a white chalky deposit. The greater number of the Gannets breed during June.



HABITS

Gannets are among the most powerful and active of all the marine birds. Their flight is very swift and accomplished with rapid wing beats or sailing, with equal celerity. As they are coursing about at varying heights their eyes are fixed upon the water below, for their food consists almost wholly of the smaller fish that swim near the surface. When one is sighted in a favorable location, they partially fold their wings, and straight as an arrow dart after their prey. The water is dashed into foam as they plunge head foremost beneath the surface, to reappear almost immediately a few yards away and bearing a shiny fish in their beaks. Sometimes they soar to a great height and wheel round and round, seldom setting on the water, except to sleep. They traverse long distances and often go a great ways from their breeding grounds in search of food. Their wings are long and pointed and both the muscles and bones are very strong. Each beat of their wings sends them forward for an astonishing distance. A bird that appears as a mere speck on the horizon will come up, pass on, and disappear in an incredibly short time. They are entirely maritime birds and if ever found inland it is because they have become exhausted and blown out of their course by severe storms.

Except in the winter when single individuals may be seen along the coast, Gannets are gregarious and nest and fish in great flocks. The only nesting places in America are supposed to be on two or three of the Magdalen Islands in the Gulf of St. Lawrence. At present there are estimated to be about two thousand Gannets in the flock that regularly return to these islands. There were formerly a great many more but thousands were killed off by fishermen either out of wantonness or for bait, to be used in their cod-fishing, and thousands more of their

eggs were either taken or destroyed. A large colony of Gannets still nest in Iceland and it is claimed that on several small islands off the coast of England and Scotland there are colonies estimated at two hundred thousand. They nest on the narrow ledges on the face of the high cliffs. It is a thrilling sight to see these great white birds sitting as closely as possible on every available ledge, nearly all facing towards the high rocky walls. Many of them are simply resting but more are setting on a single white egg. Some of them build quite bulky nests of sticks and seaweed, while others have barely any. These birds float high in the water owing to the buoyancy caused by air cells beneath the skin. These they are able to inflate or deflate at will. Their food is largely of small herrings which swim near the surface and can easily be seen as the birds soar aloft. They do not dive from the surface of the water as do loons, ducks and cormorants.

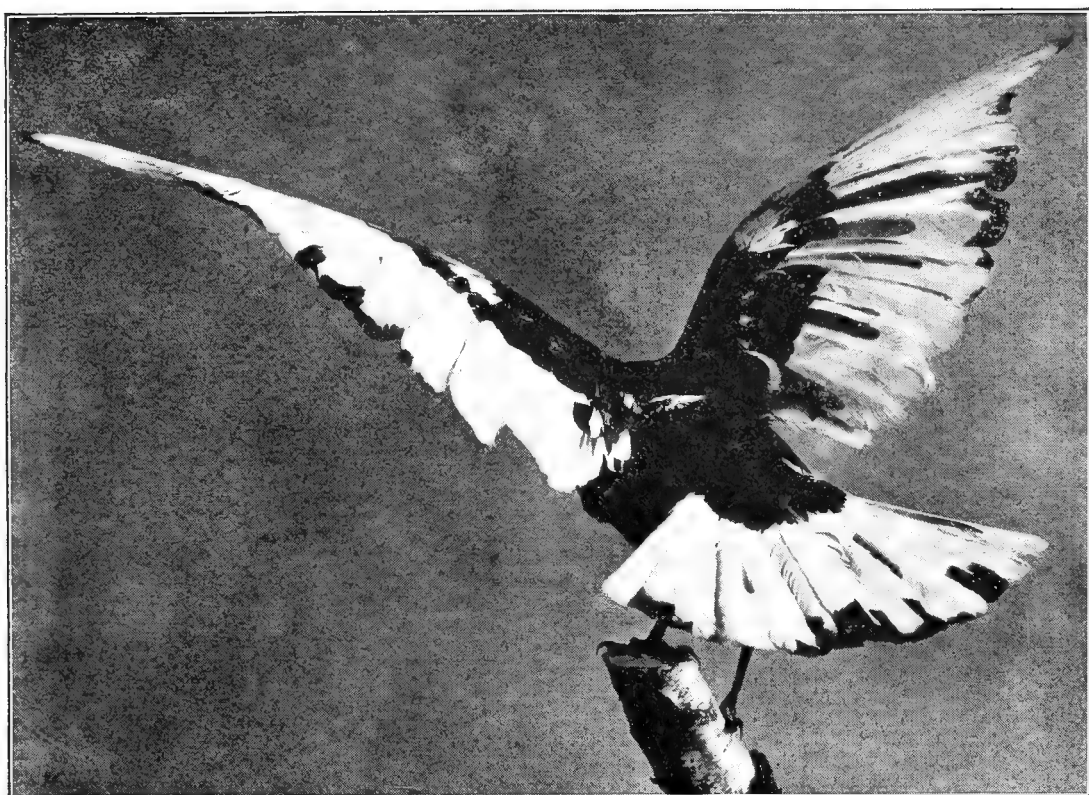
THE INEVITABLE END OF AN ALBINO.

A pair of black Crows resided in the town of Whitinsville, Mass. Many other crows lived there too, but these two are of special interest. Early in May they found a large pine tree, standing alone in a field; the branches were very dense and from the ground it was impossible to see anything in the top. Here they carried sticks and roots until they had formed a large and satisfactory nest.



A PARTIALLY ALBINO CROW.

The four eggs that soon occupied it apparently did not differ from those of other crows; neither did the young when they emerged from the shells. As they grew older and began to show signs of sometime having the glossy black crow plumage, it was seen that something was wrong with the wings and tail of one of them. The feathers, which should have been as black as night, were like snow. At this unheard of occurrence, the parents were at first very anxious, but soon, when his feathers grew out so beautiful, they were very proud of him and during the first days of his flight he was guarded from danger as crows seldom are.



ALBINO CROW.

(Showing the symmetry of the markings.)

Everything went well with him until fall. He had moulted and his beautiful plumage was still more beautiful. His body was of that iridescent black that is the joy of a crow's heart, while his wings were evenly marked with snow white. He was regarded with reverence and awe by the rest of the flock, with which he associated. One morning a farmer's boy caught sight of this strangely marked bird, and before night it was noised about town that a white crow was seen on such a place. This news was received with unbelief until during the next few days, several other residents had verified the report.

Day after day for over two weeks, every man and boy in this town and many neighboring ones, who owned or could borrow a gun, was out seeking to slay the "white crow." The name became a by-word in the town; the crow seemed to bear a charmed life; and the tale of his hair breadth escapes read like a fairy story. One man using his wits together with the gun, concealed himself in a corn shock, at about four o'clock one morning, in a field where the flock of crows daily fed. All unsuspecting the flock settled in the field. The white one was with them. The charm was broken. So ended the career of this remarkable bird, except as his stuffed skin is shown to admiring friends; not because he was a crow, not because he had ever done harm to mankind, but because he was a freak and a marked bird.

LOUISIANA TANAGER.

A. O. U. No. 607.

(*Piranga ludoviciana*.)

RANGE.

The United States west of the Plains and south of British Columbia. In Winter, migrating to Guatemala.

DESCRIPTION.

Length, 7 in.; extent, 12 in.; tail 3 in. Eye, brown. Feet, blue-gray. Male—Whole head scarlet or crimson, this extending well down on the breast and shading into the yellow of the under parts. Back, wings, and tail, black. Under parts, rump and two bars on the wing, yellow. Female—Upper parts olive, brightest on the crown and rump. Under parts greenish yellow. Wings and tail grayish brown with olive edgings. Two bars of white or yellowish across the wings. These distinguish it from the Scarlet Tanager, of which it is otherwise the exact counterpart. The young male resembles the female and in the transition to the plumage of the adult they assume all the intervening stages of plumage.

NEST AND EGGS.



The Crimson-headed, Western, or Louisiana Tanager builds a thin frail nest of strips of bark, sticks and grasses. This unsafe house is preferably located in an evergreen tree on some of the lower branches.

They lay from three to five blue green eggs which are specked with brown.

HABITS.

The shores of Lake Tahoe, wherever the destructive timber cutters have not penetrated, are covered with a magnificent growth of pine, cedar, tamarack, and two species of "silver fir." These latter, often reaching a height of two hundred feet, straight as a spire, the trunk surrounded with level whorls of dense branches, are favorite nesting places for several species of birds, the Purple Finch, Olive-sided Flycatcher, Blue-fronted Jay, and on the lower half dead branches, the Western Robin. In one such tree I found three nests. The layers of branches, so dense that one can not see through them, seem to divide the tree into quite separate compartments, and a fledgling would be in no danger of falling from one floor to the other. There these three families were established as in the flats of a New York skyscraper; near the summit, at least one hundred and fifty feet from the ground, the Flycatcher; not far below, a family of Finches, and near the source of supplies on the ground, a Robin.

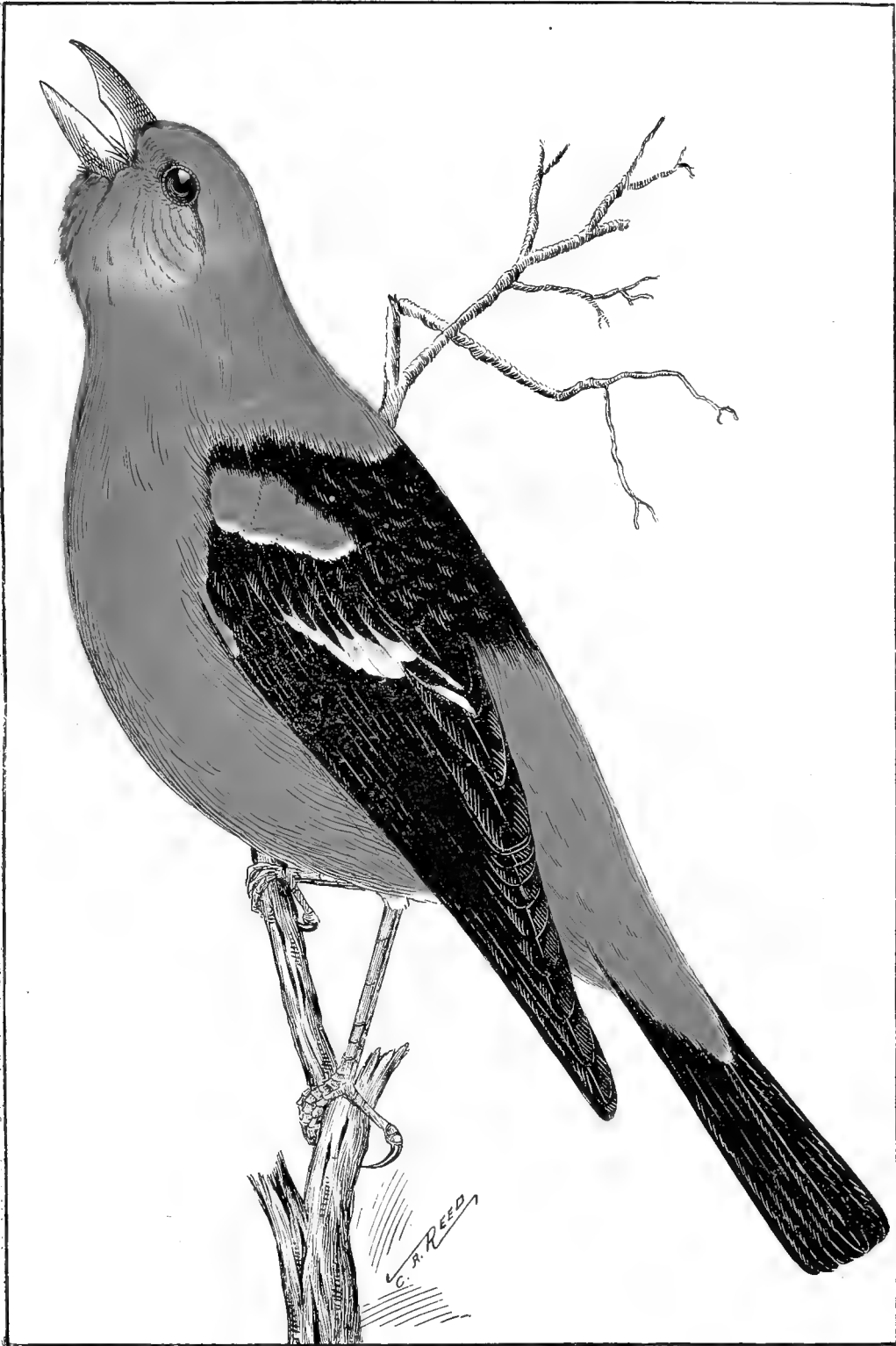
Only the Jay climbs to his house, mounting as it were by a spiral staircase close to the trunk; the others fly in at the windows.

One day I was engaged in watching these three families, when I saw a flash of scarlet and gold, and heard a sweet song, of five distinct phrases, slightly hurried towards the end, but otherwise closely resembling that of the Black-headed Grosbeak, out of the "Dusky hollows of the tree, veiled by their sunlit 'broideries," a scarlet head was peering at me, or so I thought. Soon I saw a flash of wings barred with yellow and white, in sharp contrast to the black of the back, and a brilliantly colored male Crimson-headed Tanager, in full nuptial plumage, flew to another tree, where he again poured out his song.

This movement was repeated and I found that he was circling about me, always looking in one direction. Before long I found that I was not the center of attraction, for he flew to a small pine tree behind me, alighted on a slightly pendant limb about twenty feet from the ground and stooping over, seemed to be feeding young. There I found the nest, the center of his thoughts, towards which his song was directed from morning till night, for he never seemed to go out of sight or hearing of it. The nest was a very frail structure of yellowish root-fibres and twigs, quite inconspicuous from its position in a tuft of pine needles.

The position at the end of a slender bough, was well chosen as a protection against the chipmunk, one of the two most dreaded enemies of nesting birds in the Sierras. I had seen a more accessible nest robbed

by them the year before, after a long and desperate siege, in which the parents bravely defended their home and drove down the mauraders time after time as they attempted to reach the nest. All the nests that I found this year were at the end of small boughs in moderately small trees standing somewhat alone, and always in the neighborhood of a bare, dead tree, where the female liked to take her exercise during the period of incubation, in full sight of her precious charge. Here she would sometimes linger, uttering her anxious cry note of "puttery" always trying to scold away the observer till the male came and drove her back to the nest. I never saw him share in the task of incubation, but otherwise he was a model of gallantry and devotion. After flitting about in a circle from tree to tree, where the sight of his brilliant golden breast and scarlet head flashing among the dark green of the firs, and the cheery note of his song, must have enlivened the long hours for his quiet, yellow and green mate, he would fly to her and they would exchange some words of endearment in an undertone, that sounded like "coy-coy" or "qui-qui." Once she could not bear to have him leave her so soon again and called him back. He immediately returned and brought her a fly which he caught on the way. This love talk seems to be developed from the baby talk of the race. The young beg in the prettiest manner, saying or rather singing, "kyriot-kur-i-e, kuri-e-e" in such musical tone that it sounds like a fully developed song of some other species. This is gradually shortened and softened into "coo-ee," "coy," or "qui," and then used as the confidential language of the mated birds. Day after day I watched the little cavalier with his pretty attentions to his lady, not attempting to get a nearer view of the light blue eggs, specked with brown, which I could almost see through the bottom of the slightly built nest. On July 21st a change came. When her mate appeared with an insect, the female slipped off and disappeared, instead of waiting to be fed. The father, for so he now was, paused on the edge of the nest, admiring his new born offspring, and then very carefully administered the worm. After this there was very little time for singing. Both parents kept very close to the nest, not feeding so often as some birds do, but keeping a very sharp lookout for enemies. On the ninth day as I neared the nest tree, the female came to meet me, talking excitedly, and kept this up for about an hour, but never went near the nest. Later in the day I found the whole family re-united in a grove of tamaracks very close to where I was camping, and here for some weeks, I could watch the pretty ways of the young birds at my leisure. The male very rarely sang now, but the note of the young ones, as they sat high up in the pines, constantly begging, was almost as musical as a song. Like little



Tommy Tucker they sang for their supper. What a contrast to the barbaric group of young Robins. The young seemed remarkably well fledged and able to fly well for their age. They were colored very much like the mother, with olive and pale yellow.

Although this bird breeds in high wooded mountains chiefly in the transition belt which extends along either side of the boreal of the central peaks, all along the Sierras and most of the Coast Range, it is often seen throughout the state at the migration season, on its way to and from its winter home in Guatemals. On May 14th I saw the males in full plumage in the forests of Mendocino County, apparently preceding the females to their breeding haunts. So they must be among the late arrivals. In the Sierras, nests had young in them the last week in July. I have also found a nest with young on July 10th, at a greater altitude, near Lake Independence.

ANNA HEAD.

TWO ARCHED NESTS AND THEIR OCCUPANTS.



SOMETIMES even the most common of our birds prove the most difficult subjects for the nature photographer. The two that figure with this article seemed possessed with the intention to cause as much trouble and inconvenience as they possibly could.

Probably nearly all of our readers have heard the elusive little song of the Yellow-winged Sparrow; that is those who live within its range. Perhaps too, many may have heard without noticing it, for it is a song that would attract the attention only of sharp ears; a squeaky twitter of the insect from which it gets its name of Grasshopper Sparrow. Hardly more noticable than the song is the bird that utters it; a small dry-grass colored bird whose beauty of markings is only revealed by a close inspection.

As their colors are designed to protect them from observation, so are their habits so calculated as to mislead anyone who would search for their nest. The continued presence of a pair of "grasshoppers" in a large field that I often passed, finally tempted me to hunt for the nest. Fortunately the search was commenced early in the day, for it proved to be an all day's task before success awarded our efforts.

A single large stone, lifting its head above the earth, adorned the center of the field. This was a decided convenience for the birds and



Photo from life by C. A. Reed.

GRASSHOPPER SPARROW ON NEST.

doubtless was a factor in their choice of a location. One of the birds, presumably the male, seemed to be continually on guard, for no matter at what time of the day I had passed, a small speck on the highest point of the stone showed that he was on duty. No sooner would we show ourselves above the stone wall, than he would utter the peculiar trill and commence to travel excitedly back and forth over the top of the rock. Within from fifteen to twenty seconds his mate would appear beside him as suddenly as if she had come from within the rock.

Not having the slightest idea as to which direction from the lookout, the nest was, all search for it was in vain. Upon our approach both birds would fly to the opposite wall, where perched at some distance apart, each in turn would venture remarks congratulatory to each other on their success in fooling us. Time after time we concealed ourselves behind the wall and with powerful glasses watched every movement in the hope of seeing one of them return to the coveted spot; the result was the same every time we tried this plan,—we got left. As soon as we had seated ourselves behind the wall both birds would return to the observation rock. For five or ten minutes they would remain there still scolding but not as frequently, then one of them would quietly slip off into the grass and return to the nest without our being any the wiser. As we found later, not only did she walk all the way to the nest, but even started from the rock on the opposite side. We finally did locate it by remaining in concealment for a little more than two hours, when having left the nest for food she returned without the usual caution and flew to a certain spot in the grass. After waiting for about fifteen minutes longer, a quick rush to the spot where she disappeared, flushed her from the nest before the male had an opportunity to warn her.

The nest was about twenty-five yards from the lookout, faced towards the north and was artistically roofed over with dead grasses. What forethought these little birds show in building their home so that the hot rays of the sun can never strike upon their little ones. What a contrast was the nest of the Bay-winged Sparrow or Grassfinch which was but a short distance from this one. This Sparrow's nest was in a patch where the grass was considerably shorter than elsewhere and had no protection of any kind. On some of the hottest days during the summer this bird was compelled to brood the young nearly all day long to protect them from the scorching heat, she herself, with feathers all ruffled out being a picture of misery, while her neighbor sat comfortably in her snug little home. This nest of the Yellow-wing when found on June 15th, held four eggs; the next day it had five, which was the complete set. I only called on her occasionally for two weeks, but had



Photo by C. A. Reed.

NEST OF GRASSHOPPER SPARROW.

planned to try a picture of her when she had commenced to set close just before the eggs hatched. How easy it is to make plans and how little it takes to upset them.

Commencing with June 29th daily visits were made to this nest. The disposition of the female seemed to have undergone an entire change for instead of now leaving the nest as soon as anyone appeared she trusted entirely to color protection. In order not to startle her too suddenly I walked by her several times without appearing to notice her; then gradually longer and longer pauses were made when opposite the nest until at length she allowed me to stand and look at her from a distance of about five feet. Not a movement did she make but her bright brown eyes snapped with excitement and anxiety. At the first sight of the camera which was then brought up she left the nest with a rush.

The next day after two trials the camera and tripod were placed for an instant before her, but she would not wait to be focussed upon.

The several trials that were made each of the next two days were equally without results except that they served to lessen the fear of the Sparrow to such an extent that on two occasions the apparatus was all ready and the slide being drawn when off she flew, leaving the operator to pick up his traps and trudge homewards, still not discouraged (but almost.)

Success is the reward of perserverance and the next day I obtained the longed for portrait of a Grasshopper Sparrow as she sits on her treasures under her own roof. This picture as shown here is enlarged about three times from the original and is life sized.

Extending from one end of the above field for a mile or more is a succession of patches of open land and small growth. It is an ideal place for a great many birds to nest in, and is one of two localities where I spent all the time that I could spare last summer. Frequent calls of the Bob White proclaimed that they too found it to be a very agreeable place. Nests of these game birds are much more often found by accident than by any continued search, as the sitting bird will not leave the nest until almost trod upon. A careful overhauling of what appeared to be the most likely place for a quail's nest to be located failed to reveal any trace of one.

It was found finally when I was least expecting it. I was just stepping up on a wall with a complete photographic outfit in hand when out from under my uplifted foot dashed a quail with a whir, which to say the least, startled me. Hastily stooping down, I looked upon a nest filled with white eggs, fifteen of them, all of which are shown in the accompanying half tone. The nest was in back against the wall surrounded and almost concealed from view by the tall grass; ivy leaves from the vines creeping along the wall also drooped over to help hide the opening. These latter were moved to one side in order to photo-



NEST OF BOB-WHITE.
(Showing fifteen eggs.)

Photo by C. A. Reed.

Identification Chart, No. 12.

Brilliant Orange and Blackbirds.No. 503, Audubons Oriole, (*Icterus audubonii*.)

Valley of the Lower Rio Grande in Texas and Mexico. Length, 9.5 in. Under parts clear yellow; upper parts greenish yellow; head, neck and breast, black; wings black, greater coverts tipped with white and primaries edged with white; tail black, the feathers being edged with white and the outer ones tipped also. Female not noticeably different.

No. 504, Scott's Oriole, (*Icterus parisorum*.)

Southwestern United States from western Texas to southern California. Length, 8 inches. The lesser and middle coverts yellow; greater coverts broadly tipped with white and the inner secondaries edged with the same. Tail black, except the basal portions of the outer feathers which are yellow. Female:—Above, olive grayish, becoming brighter on the rump; top of head and back streaked with dark. Wings dusky with two distinct white bands. Tail yellowish olive with the two middle feathers and ends of the others darker. Under parts more or less bright yellowish olive.

No. 505, Hooded Oriole, (*Icterus cucullatus*.)

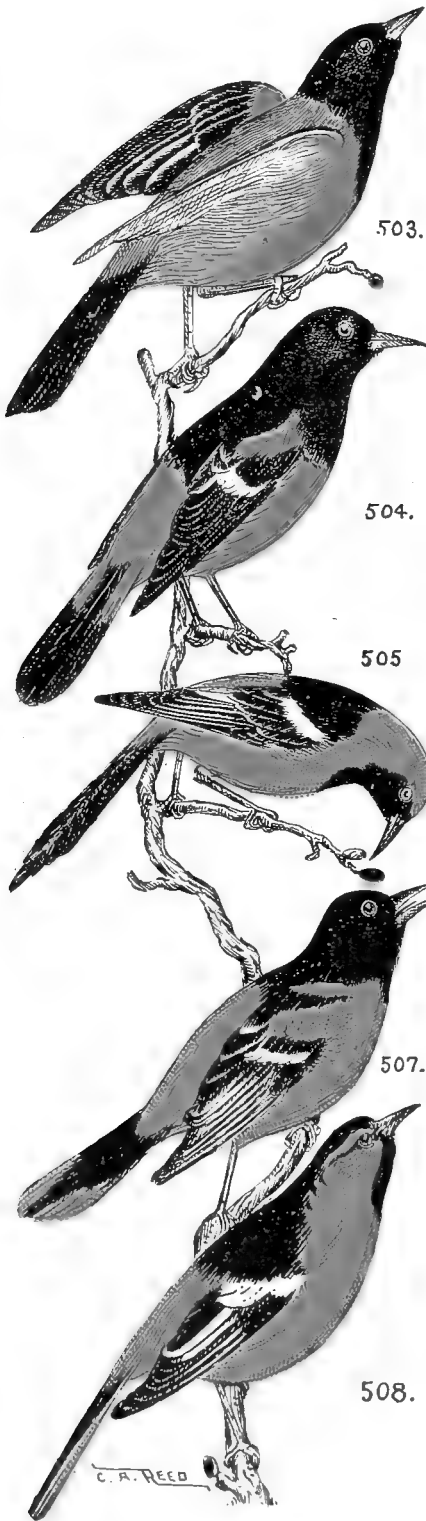
Valley of the Lower Rio Grande in Texas and south to British Honduras. Length 8 in. Bill and feet blue black, the former slender and decurved. Coverts tipped with white. Tail entirely black except slight white tips to the outer feathers. Female:—Grayish olive above. Tail and under parts dull yellowish. Wings dusky, and coverts edged with white.

No. 507, Baltimore Oriole, (*Icterus galbula*.)

United States east of the Rockies and southern Canada. South of the U. S. in winter. Length, 7.5 inches. Black and orange. Middle and greater wing coverts tipped with white. Middle tail feathers, black; the others for the most part, orange. Female:—Very much paler, the black being nearly all obscured by olive. Young male like the female except that it lacks all traces of black on the head and throat.

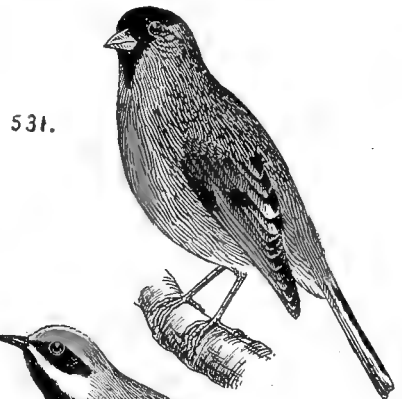
No. 508, Bullock's Oriole, (*Icterus bullocki*.)

Western North America from Manitoba and British Columbia to Mexico. Length, 8 inches. Sides of head and narrow frontlet, orange, leaving the chin and throat black. Edge of secondaries and whole of middle and greater coverts, white. Two middle tail feathers black; the others orange except for the black tips. Female:—Upper parts olive gray. Breast, tail, sides of head and forehead, yellow. Two white wing bars. Other under parts gray.



No. 531, Lawrence's Goldfinch, (*Spinus lawrencei*.)

California west of the Sierra Nevada. Length, 5 in. General color, grayish whitening on the belly. A black mask covers the top of head, face and chin. Patch of clear yellow in middle of breast. Wing coverts, edges of primaries and rump, yellowish. Female somewhat paler and the black mask is lacking.



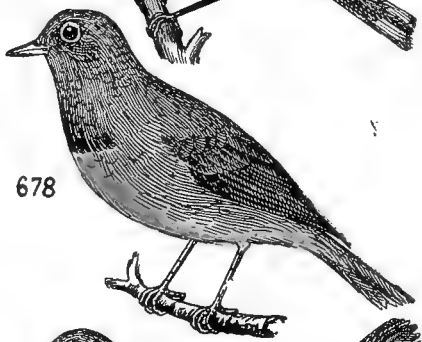
No. 642, Golden-winged Warbler, (*Helminthophila chrysoptera*.)

Eastern U. S. from southern New England and Ontario southwards. Length, 4.75 in. Upper parts blue gray. Coverts and crown bright yellow. Large white spots on the three outer tail feathers. Female: Back and crown more or less greenish yellow, and the black obscured or entirely lacking.



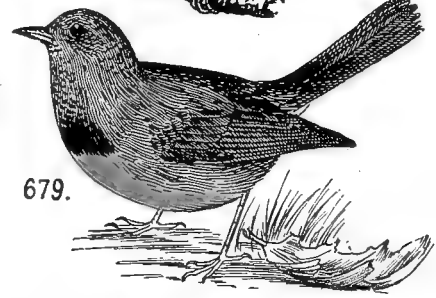
No. 678, Connecticut Warbler, (*Geothlypis agilis*.)

Eastern North America, breeding north of the United States. Length, 5.5 in. Whole head and neck all around, pure ash darkening on the breast to almost black. Upper parts greenish; lower yellow shading to greenish on the sides. In the fall the head and neck above are greenish and the throat is paler. A conspicuous white ring around the eye will distinguish it from the next species. Female somewhat paler.



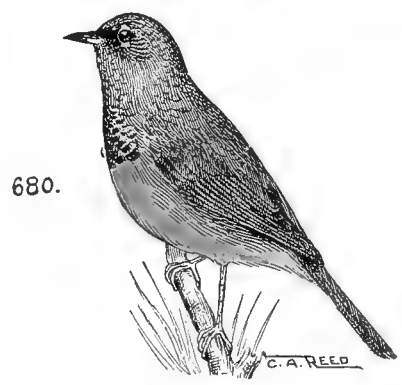
No. 679, Mourning Warbler, (*Geothlypis philadelphia*.)

Eastern North America, breeding from northern U. S. northwards. Length, 5.5 in. Similar to the above. No eye ring. A decided patch of black on the breast and remainder of throat showing traces of the same through the ash. Young birds lack the ash on the head to about the same extent as the last species.



No. 680, Macgillivray's Warbler, (*Geothlypis macgillivrayi*.)

Western North America from the Rocky Mts. to the coast and from British Columbia southwards. Length, 5.25 inches. Similar to the two preceding. A white spot on both upper and lower eyelid (not a continuous ring). Black line from base of bill to eye. The ashy feathers of the throat with black centers, this producing a mottling. The female is considerably paler.



graph the nest and eggs. A small piece of paper was pinned to the ground at just four feet from the nest. The next morning, with the camera all in readiness I walked along the wall and when opposite the nest, with the piece of paper as a guide made a snap shot of the female on the nest. She looks quiet enough in the picture but at the click of the shutter dashed out of the nest as though shot at with a gun instead of a harmless camera.

While this picture is a good ways from being an ideal one, it is the best that could be got under the circumstances, and in live bird work one has to consider himself fortunate if he can get a picture of the bird regardless of the surroundings.



Photo from Ilfe.

BOB-WHITE ON NEST (female).

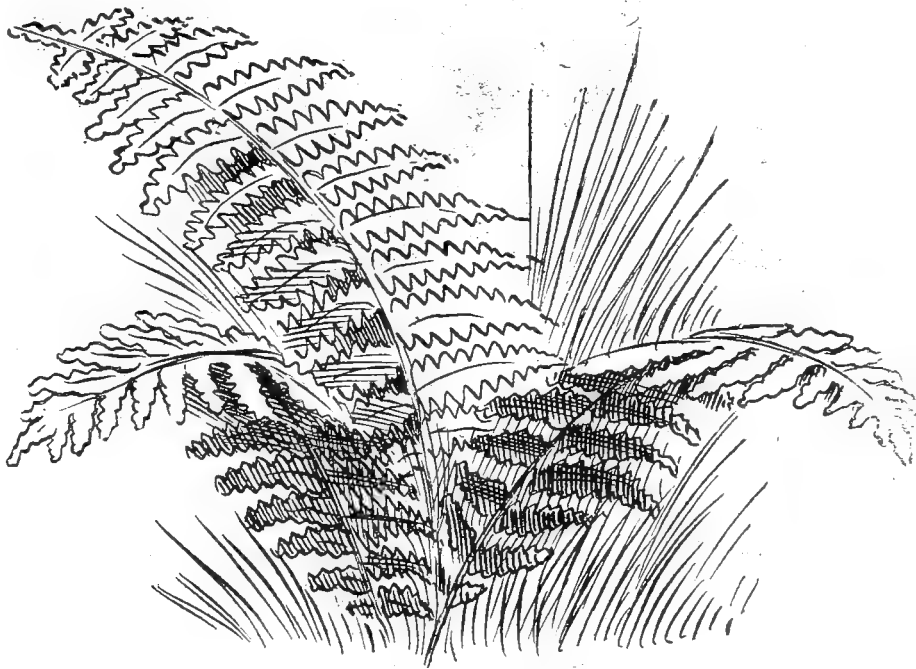
SECRETS OF "MEADOW BROOK."



THE scene of the following observations and records was situated on the outskirts of the borough of Lansdowne, Penn., and consisted of a long stretch of beautiful meadow land intersected by a winding brook, and a portion of which was covered with briars and medium size trees; also two or three large oaks and beeches.

The date of my first visit to this locality was in the early spring of the year 1901, and from that time on I repeatedly roamed over the district looking out whatever there might be to see and learn. To those not accustomed to observing the many natural attractions around them, "Meadow-Brook" would probably mean nothing more than a field, a stream of water and some trees, but to those whose eyes and ears are trained in such matters, and who are looking for what nature has in store for them, a great many things of interest and instruction were to be found.

The writer will now record a few of his observations in the order in which they occurred. The first stroll was taken in the latter part of February and of course there was not so much to be seen this early in the season. However, the cheering song of the Song Sparrow was heard and Snow Birds were plentiful amongst last year's weed patches. On March 5th I was delighted to hear the soft warbling of a number of Blue Birds—dear heralds of returning spring—which had evidently arrived but recently. They were flitting here and there and probably looking for a suitable site for the nest to be built later on. On March 12th I observed Robins and Black Birds in the vicinity and welcomed them as long absent friends just returned. March 24th Pewees were in the neighborhood and evidently had been in the habit of summering there. A visit on April 5th found the Red-wing Black Birds again in the swampy portion of the meadow, and they



would continually mount some reed or tussock where it was wet and boggy, and taunt you with "Yer can't cum here."

April 9th was the last occasion on which I observed Snow Birds and they probably started on their northward journey soon afterward. A stroll on the morning of April 28th, revealed Chipping Sparrows, Barn Swallows, Cat Birds and Field Sparrows. May 5th (a perfect, warm spring day) I saw a pair of Kingfishers following the course of the stream and frequently uttering their harsh clatter; Chimney Swallows circled high overhead; Gold Finches sang in the willows; King Birds were perched like sentinels on the fence posts and other objects of vantage, looking for passing insects; Towhees were scratching away in



A QUIET POOL IN "MEADOW BROOK."

the dry leaves on a sunny bank; one White-throated Sparrow was observed, and many Maryland Yellow-throats were calling from amongst the new, green skunk cabbage leaves. It was one of those mornings when each little creature seemed to be overflowing with the happiness of life and trying to out-do each other in volume and variation of song.

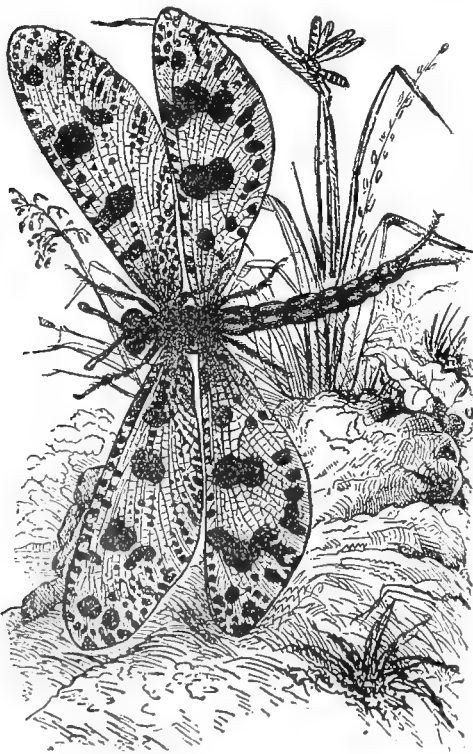
On the following day (the 6th) the sweet song of the Wood Thrush resounded through the wooded portion of the meadow, and on the 10th

and 11th respectively, Great-crested Flycatchers, and a Brown Thrasher were added to the list of new arrivals. On May 12th it was my privilege to make my first acquaintance with the American Redstart, a little gem of color flitting among the new green leaves of a spreading beech tree. He was extremely active and was soon lost to sight among the higher branches. On the same day I was greeted with the various mocking cries of the Yellow-breasted Chat, and several of them remained in the locality all summer. An early morning walk on the 19th of May discovered a Green Heron obtaining his breakfast from the brook, and upon my approach he flew to a near-by willow and there stood in motionless watchfulness. A large number of other birds were to be seen in and around "Meadow-Brook" at various times, but it is the writer's intention to confine this article to those things closely connected with this particular locality. Aside from those mentioned, I noticed the Yellow Warbler on one or two occasions, and the Maryland Yellow-throat nested there in numbers.

Now for a few words concerning the nest building which occurred in "Meadow-Brook." The list was headed by a Robin, whose nest was found on April 26th, placed in a small maple tree along the creek; contained three fresh eggs. The next find was the nest of a Song Sparrow, placed in a pile of brush (April 28,) containing three fresh eggs. Upon calling there again on May 15, the nest contained four little ones. On the original walk, April 28th, it occurred to the writer to look under a road bridge which we were passing, and we were delighted to find the nest of a Phoebe Bird placed on one of the girders or wooden supports. It contained six white eggs well advanced. On May 2nd I discovered the nest of a Blue Bird, but could not see inside owing to its being deep down in a hollow scrub tree. A pair of Flickers also nested in a tall maple near an old tumble-down spring house. The upper portion of the trunk was decayed and a round hole near the top told where the nest was. May 14th, while walking through my favorite district, I noticed a Field Sparrow jump out of a bunch of tall grass almost under my feet, and investigation revealed a beautiful little nest with four uniform eggs in it; the bird was then setting. The following day I found another Song Sparrow's nest containing five eggs—four uniform and the fifth much lighter and differently colored. May 22nd, while walking by a thick clump of briars, I was attracted by the sweet and variable notes of a Brown Thrasher, and upon searching the briars carefully I found a newly completed nest with one egg. Four days later four eggs were deposited; nest composed of sticks, grass and small roots. A short time afterwards I came upon the nest of a Cat Bird in a tall bunch of alders by the old spring house before mentioned; nest

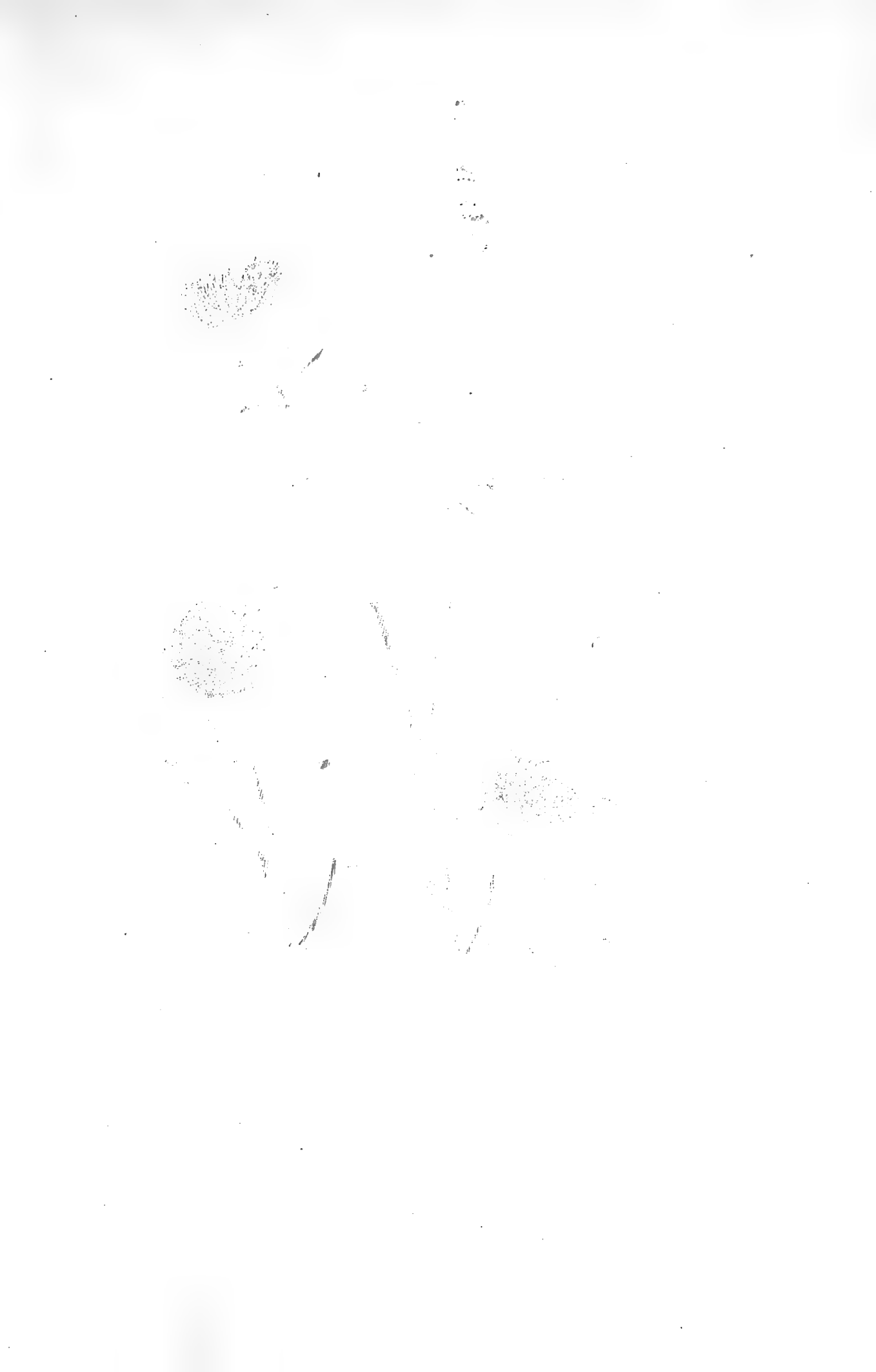
composed of sticks and roots, also large pieces of white tissue paper. On the 26th of May the nest contained four eggs. About the same time two other Cat Bird nests were found in the vicinity; all composed of the same materials and containing about the same number of eggs. The song of the Cat Bird is extremely sweet and beautiful at this season of the year, almost rivaling that of the Thrushes and other noted vocalists.

On June 1st, noticing a Yellow-breasted Chat come out of a bramble patch on the hillside, and acting in a suspicious manner, I made a short search and soon found a newly completed nest and one egg. June 11th a second Field Sparrow's nest was found on the ground among some low maple saplings; this nest also contained four eggs. During June a third Song Sparrow's nest was discovered on the ground among some tall grass and cat tails. Aside from birds, nests and eggs above mentioned, "Meadow-Brook" was a paradise for wild flowers. The dearly loved blue violets head the list, first appearing about the 20th of April and blooming continuously until the latter part of May. There were several varieties, the deep purple of the warm, dry banks, the paler blue of those growing in the wooded portions of the locality, and the light blue, long-stemmed ones that grew in the marshes. The very small white and yellow varieties were also noticed in the wet places.



Spring Beauties made their appearance about April 23rd, and were especially numerous on the hillside, looking as if a large white sheet had been spread on the grass. Dog-tooth violets first made their appearance about April 28th and bloomed in profusion for a time, being especially numerous under a large spreading beech tree; what a pretty sight, all those delicate yellow bells hanging on their graceful stalks over the spotted leaves, which were so thick as to form a carpet of green. May 8th the Indian Turnip or "Jack-in-the-pulpit," made its appearance, followed about May 12th by the large yellow Buttercup and white Daisy, which bloomed in company and countless numbers throughout the season.

This is one of the pretty sights of the spring time; hundreds of white flowers nodding with every gentle breeze, and intermingled with the



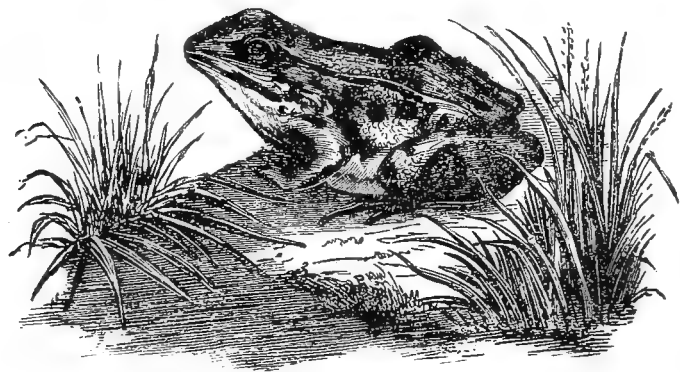


AMERICAN GOLDFINCH.

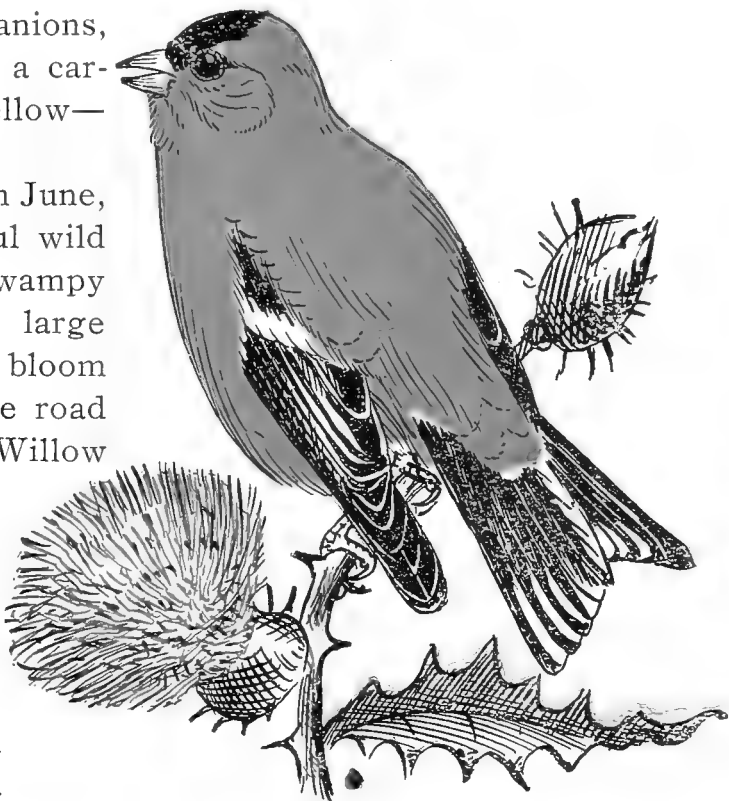
golden cups of their companions, while underneath was spread a carpet of rich green and bright yellow—the Dandelions and grass.

During the first three days in June, I found a number of beautiful wild Blue Flags or Iris in the swampy part of the meadow, also a large patch of Hawk Weed in full bloom and pretty Ground Ivy by the road side. The wild Phlox or Willow Herb also grew in great profusion and the blooms were so thick and so bright in color as to give the whole marsh a purplish appearance from a distance. All through July the Primrose was conspicuous, also Lobelia, Toadflax and Blue-eyed Grass. On July 27th I

came across a cluster of tall spotted Wood Lily stalks on which were a large number of flowers; one stalk in particular, was the tallest I ever saw, measuring nearly eight feet. The well-known spotted Touch-me-not and the Monkey Flower were to be found throughout July and August, and about August 5th the Golden Rod first made its appearance and through the Autumn months certain portions of the district were literally covered with beautiful waving plumes, intermingled with the white and purple Aster and other late flowers. Thus the season wore on, each month in turn bringing its own individual beauty and changes.



them by their proper environments, and the embryo will burst the confines of its shell and push forth—perhaps into a great trunk—which shall for ages cast its shadow across the plains.



AM. GOLDFINCH.

A favorite resting place was beneath one of the large oak trees close by the brook. The ground here was covered with last year's acorns, from many of which sprouts about an inch long were protruding. How wonderful; within each tiny acorn were the possibilities of a sturdy oak; surround

During the latter part of September and through October, "Meadow-Brook" was beautiful with the splendor of Autumnal dress. The maples were crowned with crimson and golden verdure; the leaves on the blackberry briars showed a marvelous blending of brown, red and green; large clusters of Indian Turnip berries shown among the decaying leaves like beacon lights; the common poison vine had turned a rich scarlet, and the sassafras and spice bushes were multi-colored. One large oak tree especially should be mentioned. The trunk was very straight and tall, and around this a number of poison and wild ivy vines had climbed—in spiral fashion—all the way to the top. At this time the vines showed a most beautiful blending of different shades of red and yellow, while at the top, serving as a crown for this variegated column, were the green leaves of the oak. Viewed from a distance, the effect was truly striking.

The rapidly approaching winter soon caused the transient birds to wing their way southward; the many varieties of flowers to wither and die; the royal robes of Autumn to drop from the trees. So amid scenes such as this, my observations in "Meadow-Brook" were completed for the season in question.

Their song is silenced, yet the echo stays;
The vision lingers, though the colors fail.
So summer's dear memories leave their joy always,
Though deserted their haunts, why need we wail.

BERTON MERCER



THE BIRDS ARE GONE.

Chill are the winds of Autumn,
 Sadly the dead leaves fall
To fade and be forgotten;
 The common fate of all.

Dusky is all the landscape,
 Dreary and gray the dawn,
No music greets the morning
 For all the birds are gone.

Gone is each pretty songster
 To some far distant clime,
Gone with Nature's robes of green
 And joys of summer time.

My dear friends; are they all gone?
 The birds I loved so well,
Shall I hear their songs no more
 O'er meadow, wood and dell?

It seems but yesterday eve
 I heard the Robin sing,
Watched the Kingbird's wayward flight
 The Swallows tireless wing.

Heard the Thrushes melody
 Within the pleasant wood
While I, 'neath the screening leaves
 In silent rapture stood.

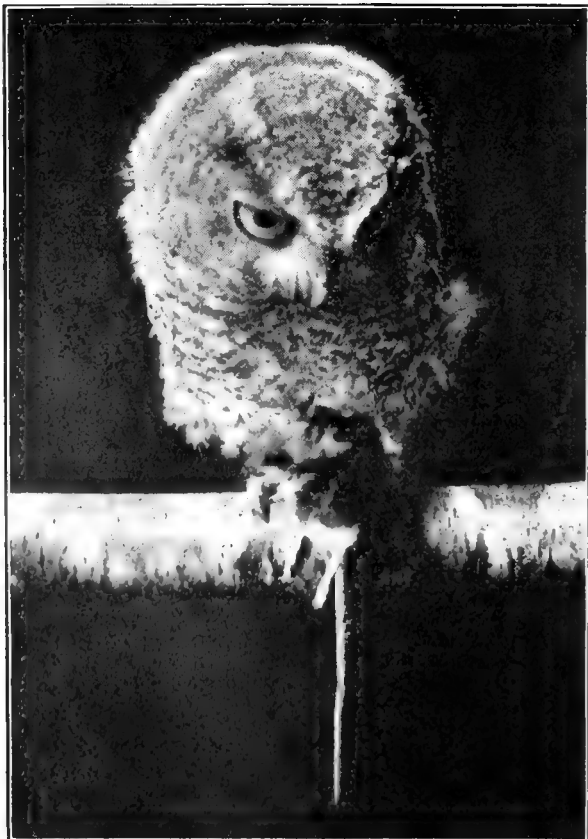
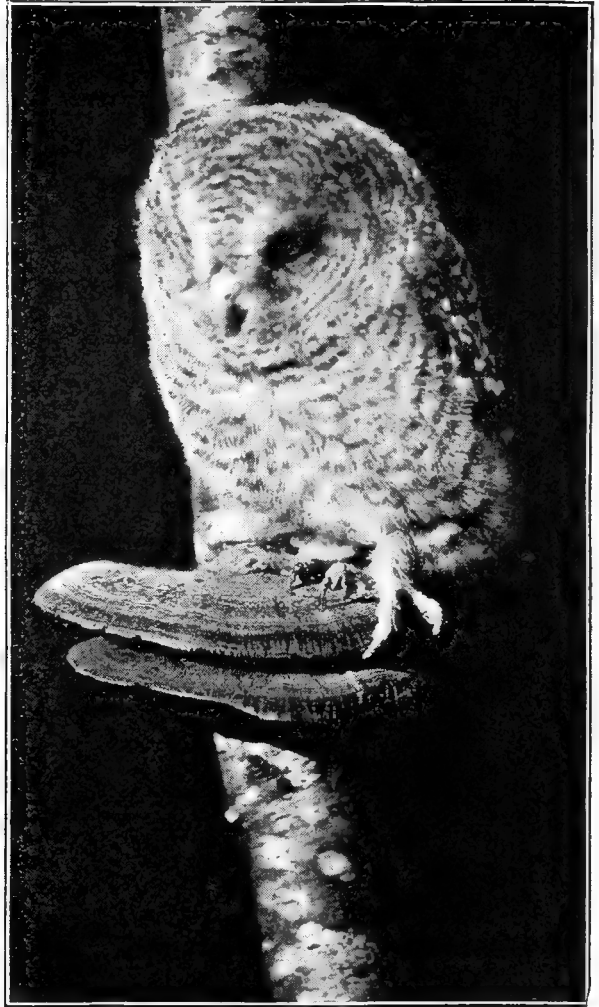
O'er the grassland decked with flowers
 The Meadow-lark's clear call
I heard, like a fond farewell
 In sweetest cadence fall.

The Song Sparrow's merry lay,
 The Warbler's lisping notes,
And all the woodland music
 From countless tiny throats.

All joyless now is Nature,
 Her choir no longer sings,
Gloomy and unresponsive,
 A harp with broken strings.

HATTA WASHBURN.

THE
TALE
OF
A
MOUSE.
—
MEDITATION.



GOING



GOING

GONE



REVIEWS

Country Life in America (Doubleday, Page for) Dec., contains an article that will prove of both value and interest to ornithologists. It is "A Skimmer of the Seas," by Frank M. Chapman. The continued abundance of these birds is accounted for by the author as follows: "Marvelously graceful in the air, the Skimmer is so grotesquely ugly, when at rest that not even the milliner considers it available for alleged decorative purposes; consequently it has been spared when the more beautiful terns that formerly nested on the beaches with it have been destroyed by countless thousands. Skimmers, today, therefore, are numerous in favorable localities on the coast from Maryland to Texas." It has been a common report for years that Skimmers did not sit on their nests during the day time except in stormy weather. The several photographs that the author secured of Skimmers on their nests gives optical proof that the common report was in error. The illustrations include a number of remarkable photos of flying Skimmers.

The Condor, November-December, contains the following leading articles: "Birds of the Little Sur River," by Joseph Grinnell; "Holboell Grebe in Montana," by P. M. Silloway; Part II on "Land Birds of the Redwood Belt of Northern Calif.," by Walter K. Fisher; "Birds collected in Norton Sound, Alaska," by Richard C. McGregor; "The Least Tern at San Diego. Mr. Walter K. Fisher has assumed the responsibilities of editor upon the decease of Mr. Chester Barlow.

Ernest Thompson Seton's plea for detailed records of observations made afield; F. A. Lucas' account of birds' weapons, and Frank M. Chapman's instructions to students as to the best ways to study birds are the leading articles in Bird-Lore (The Macmillan Company) for December. The illustrations include one of Ernest Thompson Seton in his Manitoba camp, the first group in a series of the prominent ornithologists forming Bird-Lore's Advisory Council, and a remarkable view of a colony containing 2,000 Flamingoes' nests.

Messrs. Dana Estes & Co., announce that the fifth revised edition of the "Key to North American Birds" by Dr. Elliott Coues, so long and patiently awaited by the public, will be ready in the spring of 1903. The reason for the unusual delay in its publication may be briefly stated. When Dr. Coues died in 1899 he left the manuscript wholly finished, but the copy was rendered hard to decipher without the exercise of most intelligent care by reason of innumerable interlineations, erasures, abbreviations, "riders," and detached notes, written in a minute and sometimes difficult handwriting. It was evident that had the Doctor lived he would have cast his material, although entirely completed as he left it, into a form which would present fewer difficulties to the compositor. His sudden death left the copy in such shape that the task of revision and preparation for the press required double the amount of work that had been anticipated. The publishers, however, have had

the good fortune to obtain the services of a thoroughly equipped ornithologist, who has read the proof with the most painstaking care, which has been ably supplemented by the efforts of a number of professional proof readers. The result is a book which Dr. Coues would have been proud to own as the crowning work of his life. The publishers announce it as being absolutely authoritative and definitive, and express confidence that it is entirely free from errors of statement or form.

ANSWERS TO QUERIES.

In this new department, we shall endeavor to answer questions of an ornithological nature. The time at our disposal for correspondence is very limited and we have been wholly unable to answer the host of queries that have come in the past. Our subscribers may feel at liberty to ask questions as freely as they wish concerning birds, bird photography or photography in general.

We have received inquiries from a great many sources concerning the outfit used by the editor in his bird work. Perhaps a detailed description of the required apparatus will satisfactorily answer all questions in this line. The most important part of an outfit, of course, is the camera and the most important part of the camera is the lens. A 4x5 camera is the most suitable for all work pertaining to birds, or their nests and eggs. Anything larger means that you are simply carrying useless weight and bulk. A good 4x5 negative will easily enlarge to a 16x20 if necessary, and if you can not get a good picture on a 4x5 plate you certainly could do no better on a larger one and the expense would be greater.

As to the make of the camera, you can suit yourself on that; the past season I have used mostly a home made one. It is not a very handsome affair, but I did not make it to look at; it was made to accommodate the large lens that I was using. In selecting the camera of your dealer, notice particularly the bed of the camera and the extension; see that when the bellows are fully extended there is sufficient strength to hold the lens without undue vibration.

The ordinary lenses, provided that they are double, supplied with the camera are all right, only I should make arrangements with my dealer to fit a 5x7 lens in the 4x5 box. This lens usually has a focal length of about 8 in., and it will be absolutely necessary to have a camera with a draw, or bellows length of at least 13 in. A longer draw than this will be better but will also cost more.

The past season I used a 9 1-2 inch focus, Extra Rapid Universal Lens made by the Bausch & Lomb Optical Co. As this has been satisfactory in all respects, I shall probably use the same lens next season.

It is the best of what are called rectilinear lenses, and is rated to cover a 6 1-2x8 1-2 at an opening of f6. It will cover the 4x5 plates on which I use it at an opening of f4; consequently it will take a fully exposed picture in one quarter of the time required by the ordinary trade lens; this value is most appreciated on a cloudy day when a snap shot is ordinarily impossible. Still higher in price are the Anastigmats that are advertised so extensively. While these may be better for some classes of work, than the rectilinear, I do not think that they are any more adapted to bird photography than the cheaper ones. I have tried several makes and could not get any better work and I have never seen any photos taken by any one else, that are any better because taken with an Anastigmat. A single or achromatic lens is not suitable because of its lack of covering power at full opening and slow speed. I have tried very few lens shutters, but the Unicum has always proved satisfactory. It is easily released from a distance and you can tell by using your field glasses whether the plate has been exposed or not by the position of the setting lever. A number of times when at an exceptionally long distance from the camera, the shutter has failed to release at the first pressure on the bulk and a second was necessary. An automatic shutter is not satisfactory for this purpose as, not only can you not tell when the exposure has been made, but it requires a strong pressure and can not be operated from a distance with any certainty.

A stout three fold tripod will be found best for holding the camera. I have painted the legs on mine a dull brown, so that it is very inconspicuous when set up in the woods and does not need to be concealed. A ball and socket clamp for attaching the camera to the tripod will be found very handy when photographing birds and is almost indispensable when photographing nests and eggs. For taking pictures of birds and nests in trees, it will be found that in nearly all cases the camera can be fastened in the tree by tying each leg of the tripod to a branch of the tree; this will make the camera nearly as firm as though setting on the ground. Fifty feet of camera tubing will be found sufficient for the majority of cases, although I have on a number of occasions used a hundred. A linen thread may be used for the purpose of releasing the shutter, but it is not as reliable as the tubing as it is apt to jar the end of the camera or to get tangled up in the branches so that it cannot be used at all. For other purposes a spool of black linen thread is one of the most convenient articles you can carry with you. By using this you can in nearly every case manage to shade the young birds from the sun while you are waiting for the adults to return. The thread can be attached to the branch that naturally furnishes shade to the little ones

so that a gradual pull will draw it to one side and let the sun shine on the nest at the time you want it.

A large mirror can also frequently be used to advantage; it should not be less than a foot square. A pair of field glasses and note book and pencil will complete the necessary outfit.

The camera should be carefully focussed on the nest and then branches or leaves that are out of focus should be tied back; nothing mars a picture so much as a branch in the foreground and not in focus. For photographing adult birds feeding the young an exposure of 1-100 or 1-50 of a second should be used; even then if they are moving very rapidly you will get a blurred picture. With the diaphragm set at f8, they must be in the bright sun to get a good picture with this speed. A bird brooding the young or incubating will allow you to use a smaller stop and expose for 1-2 or a full second in which case you can get a better depth of focus to the picture. Of course the sun must not be allowed to strike the lens and it should be at the side or back of the camera.

Photographing birds nests is a simple matter but care should be taken to secure a position that will show the nest and its contents to the best advantage and not have any near objects to blur the picture.

All nests on the ground should be taken with stop 64; if the nest is in the bright sun this will require one second exposure. It is much better though, to shade the nest and give it a longer time. Nests in trees should be taken with a small enough stop to put in focus the principal parts of the picture; if the background can be fused into an even gray it will give a better effect.

In regard to the kind of plates to use for bird work: If you have done photography and have been successful with the kind you have been using, my advice is to continue using the same. Nothing will interfere with the work of a photographer so much as the continued changing of material. Learn how to use one brand and stick to those. I have settled upon the Cramer Crown plates and use them for everything. I have experimented with these and a number of other makes and found them to be very reliable.

Remember, all who would undertake to do this work, that the welfare of the birds is of the first importance; the life of one bird is worth more than dozens of photographs. Bird photography requires a great deal of time, patience, and care; is expensive and you must incur many disappointments, and much discomfort for every successful picture. It is not something to be taken up merely to pass the time. Try for results of value.



Address communications for this department to
 MEG MERRYTHOUGHT, 156 Waterville Street,
 Waterbury, Ct.

MY DEAR YOUNG FOLKS:

We give a cordial greeting to the new comers which gather with us in this corner the first month of the new year. May 1903 be a very happy year to you everyone, new friends and old. I think we have all enjoyed our little talks together during the first year of our acquaintance, it has been a pleasure to come into touch with so many bird lovers among the children.

See what a goodly array of names are on our Roll of Honor this month. Stafford Francis rightly heads the list, for he has solved every puzzle which has been given through the year. Mary Agnes Johnson sent the answer to one of the November enigmas in rhyme. We give it below, as it was received too late for insertion last month. We would again remind you that your letters have to wait a month to be printed, as the magazine is made up a month before it reaches you. I know you will enjoy Leroy Noble's account of the thrushes which made themselves at home in his grandmother's door yard, and would all delight in such charming friends. We have had occasional calls from wood thrushes, but cannot coax them to stay with us, for, alas, our neighbors pets are cruel cats.

What do you think of Gerald Thomas' Goldfinch? Is it possible that such a dainty fellow would get intoxicated? Naturalists often secure butterflies and moths by putting out dishes of sugar and rum, which the insects sip, and become an easy prey, but have our feathered friends such weaknesses? Whom will tell us more about it? Do not hesitate to write about your birding experiences and share them with the rest of our circle.

Cordially Your Friend,

MEG MERRYTHOUGHT.

ROLL OF HONOR:—Stafford Francis, Exeter, N. H. Leroy B. B. Noble, Cromwell, Conn. Marietta Washburn, Goodwin, S. D. Joseph Shirrefs, Elizabeth, N. J. Joseph C. Nelson, Hannibal, Mo. Clair McMorran, Spokane, Wash. Gerald B. Thomas, Livermore, Ia. Mary Agnes Johnson, Kansas City, Mo. Fred T. Morrison, Montclair, N. J.

ANSWER TO ENIGMA IN NOVEMBER NUMBER.

Thanksgiving Turkey.

Turnkey, one in charge of a prison's key.
 Green is the most restful color one ever sees.
 Hank, is thread all bound together,
 Treat, is an unusual pleasure.
 Greatheart leads us to higher things,
 Veery Thrush, very sweetly sings.
 Vikings, from old Sweden came,
 Striving, we may win great fame.
 The turkey now is fat and sweet,
 That we Thanksgiving day will eat.

MARY AGNES JOHNSON, Kansas City, Mo.

ANSWERS TO DECEMBER PUZZLES.

Enigma. Wren.

QUERIES.

1. The tailor-birds make a pocket-like nest, by sewing together the edges of leaves, using their sharp bills for needles, and fibre of plants for thread.
2. The Anis, a species of cuckoo found in the Bahamas and the greater Antilles, build but one nest, in which several females lay and share the task of incubation.
3. The Crested Flycatcher lines the hollow where he nests, with cast off snake skins.
4. The Humming bird, Pewee, and Blue-gray Gnatcatcher shingle their homes with gray lichens to match the surrounding wood work.
5. The cradle of the Marsh Wrens is a globe of sedge and grasses hung from reeds in the marshes, with the doorway on one side. It builds seven nests each season, perhaps as a method of protection.
6. The Burrowing Owls make borrows, in which they lay a half dozen white eggs.
7. Bank Swallows breed in large colonies, making tunnels about one and a half feet deep in a bank of clay. The Kingfisher excavates a hole sometimes eight feet deep, in a bank of sand, gravel or earth; it often takes the bird two weeks to make the hole.

8. The Eider duck (and some other birds) plucks the soft down from her own breast to make a warm feather bed for her babies.

9. The Hornbill imprisons the sitting mother in the hollow of the tree where she nests, plastering up the opening with mud, leaving only a small opening, through which he feeds her till the eggs are hatched. She has to stay at home.

10. The Nighthawk and Whip-poor-will, "camp out" upon a rock on the ground, and the lazy Cow-bird places its egg in the nest of other birds.

FROM OUR MAIL BAG.

One day this summer as I was walking in the garden where there are many sun-flowers, I noticed a Goldfinch eating the seeds. I moved slowly towards him in order to get a better view of him. To my surprise he did not appear to be frightened, but kept on feeding. I walked still nearer and raised my hand, and as he did not offer to leave, I picked him up. I took him into the house where he perched on my finger and looked curiously around, but appeared not at all frightened. After a time I took him out of doors and after a moment he flew away and perched on a sunflower again. I have heard of birds getting drunk on different things which they eat, and I have wondered if the Goldfinch could have become drunk on the seeds which it was eating.

GERALD B. THOMAS.

On my neighbor's chimney a lightning rod runs up the side of the chimney. On this a Chimney Swift impaled itself in attempting to go down the chimney. It showed that the bird flew downward with such force that the rod stuck up about a foot above the dead bird.

JOE C. NELSON, Mo.

THE BROWNIES.

In the summer of 1901, a pair of wood thrush built a nest in a dwarf apple tree about ten feet above the ground. The tree stood in the garden about twenty-five feet from the house veranda. The birds raised one brood of three, and became quite tame during the summer, and foraged daily on the lawn for worms, etc.

In the same yard, Blue Jays had nested in a tall evergreen. The thrushes seemed to consider the Jays their enemies; and when they found one of the young jays under an apple tree near by, tried to kill it by darting down from the tree, and striking it. May 7th of this summer (1902) the Wood thrushes song was first heard, perched on a limb of a tree in the same yard, soon after its mate was seen. These were supposed to be the same that nested in the dwarf apple tree last

summer, as they seemed familiar with the grounds and quite tame. Later they began gathering material for a nest. The latter part of June, three young thrushes were hopping and flying about the yard. We had not succeeded in locating the nest.

At times both birds would appear greatly excited, and fiercely chatter and scold. Generally a cat could be found prowling about. When it was driven away they became quiet. About four o'clock one morning, the scolding was heard, and later, one of the young birds was found dead, where it had been dropped by a cat. At one time they were fiercely scolding in an apple tree which stood in the same yard, investigation proved that it was on account of an owl, which was found sitting on a limb of this tree.

As soon as the owl was driven away they became quiet. July 7th the old birds were seen feeding the first hatch for the last time. A new nest had been built in the same dwarf apple tree where they had nested in 1901, but some four feet higher, near this apple tree stood a shrub, in which a pair of catbirds had built a nest. The thrushes and catbirds seemed to be on very friendly terms; but whenever the catbirds tried to eat curdled milk from a dish that was set out for them, the thrushes seemed to take pleasure in driving them away, just for fun. A catbird would light on the edge of the dish, get all ready to take a mouthful of the curd, and down would dart the thrushes, never striking the catbird, but coming just near enough to frighten it away from the dish. The thrush would fly back on the tree and await the catbirds return, and the same thing would happen over again. You could almost see laughter in the eyes of the thrush. The thrushes never ate the curd. July 14th, the male thrush stopped singing about the yard. A little later, the song of a thrush could be heard at times in the distance. July 27th, three young birds left the second nest. During this season the old birds had become so tame, that they would feed about within two or three feet of members of the family. They would come to the foot of the stairs leading up to the veranda, when called "Brownie, Brownie" and pick up the crumbs as thrown to them.

One day the male bird brought all three of the little ones to the foot of the stairs, and fed them by turns, as food was thrown to them. At other times, the young birds would be scattered, and the old birds would go back and forth carrying food to them. It was a habit of the old birds to come daily to the foot of the stairs for a part of their food. Early in August the second trio of young birds were missed, and a day or two after the old birds disappeared. We are wondering if they will come back next season, and nest in the same yard.

LEROY B. NOBLE, Cromwell, Conn.

PUZZLES.

What is his name? We see him in the Middle States in spring and fall, and if the branches are thick in the evergreens where he so often is found, hunting for tiny spiders, insect eggs, and such food, we are very apt to learn of his presence by his voice, so you must try to guess his name now from his notes. In fall these are the smallest of little chirps just talking to himself, and sometimes a less pleasant, scolding note, that reminds one of a wren's call. But when spring comes, he remembers a lovely warbling song, as rich as an orioles, though not so loud, unfortunately we do not hear it very often, for before summer comes the singer is off to more northern woods to nest.

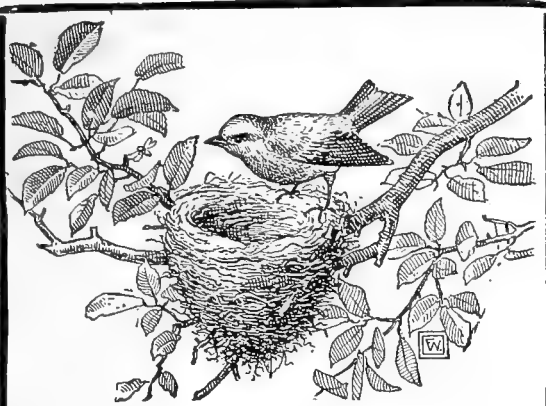
ISABELLA McLEMMON, Englewood, N. J.

A WINTER ENIGMA.

There are two birds that sometimes come to us in winter, whose names together contain 25 letters, the first name from 1 to 11, the second from 12 to 25. The first bird is a most 8, 14, 6, 1, 15, 9, 12, 11 little fellow, and he and his friends 18, 6, 19 before us as we walk through the 20, 10, 13, 4, or fly off 8, 4, 23, 15, 8, 17, 22, 9, 7. 11 as if they never minded 4, 9, 2, 8, 17, 22. Most of their plumage is 4, 21, 23, 15, 25 in 2, 25, 20, 15, 23, 12, 11 time. but it looks rather soiled now. The second bird many folks think cruel, for he 1, 9, 8, 20 on a 5, 3, 6, 11, 16, watching for small birds, and when he catches one, the strong 16, 3, 13, 24 in his bill helps him to tear the flesh. But 2, 13, 4, Naturalists 8, 16, 23, 2, 24, that the birds he is able to catch are the weakest or sometimes sick ones, and it is 5, 17, 20, 15 for them not to live, for their little ones would be weak also, and Mother Nature likes strong healthy children. So let us not say that any bird is bad till we know a great deal about him, for generally we find that he is much 5, 17, 8, 15, 25, 18, than we are 15, 16, 13, 6, 11, 21, 8.

ISABELLA McLEMMON.

Where can these quotations be found? 1. Surely in vain the net is spread in the sight of any bird. 2. A bird of the air shall carry the voice, and that which hath wings shall tell the matter. 3. Gavest thou the goodly wings unto the peacock? Or wings and feathers unto the ostrich? Which leaveth her eggs in the earth, and warmeth them in the dust, and forgeteth that the foot may crush them, or that the wild beast may break them. She is hardened against her young ones, as though they were not hers. What time she lifteth up herself on high, she scorneth the horse and his rider.



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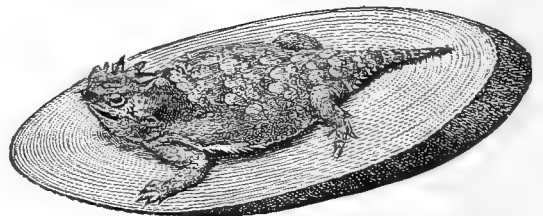
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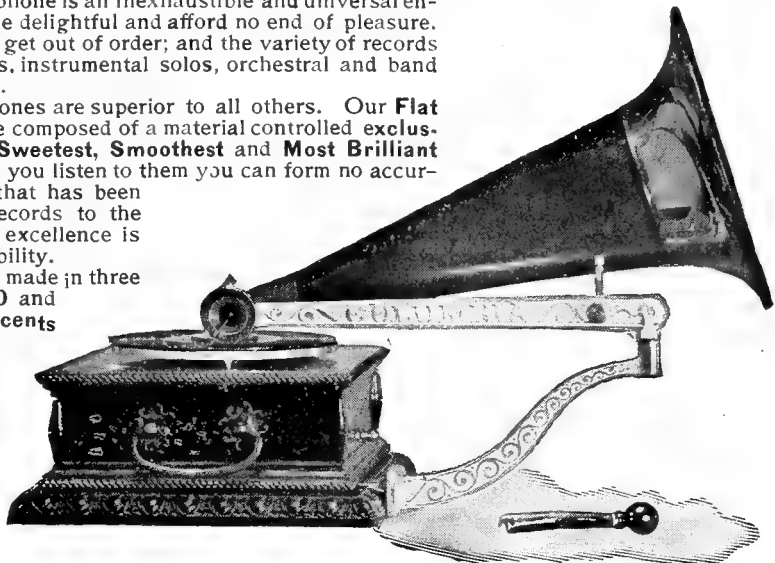
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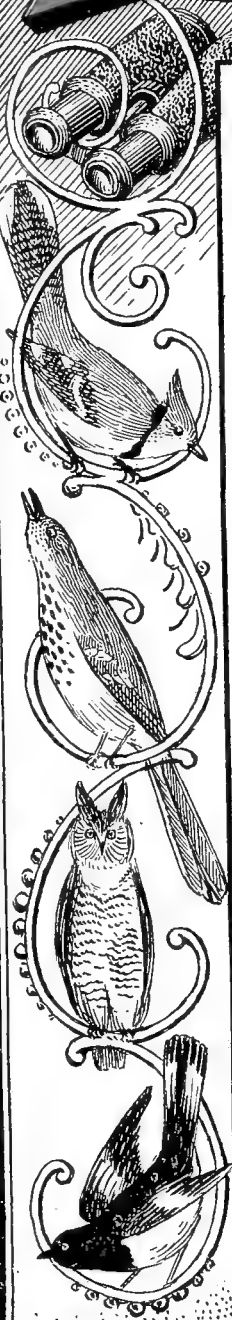
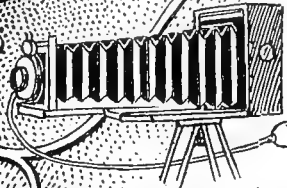
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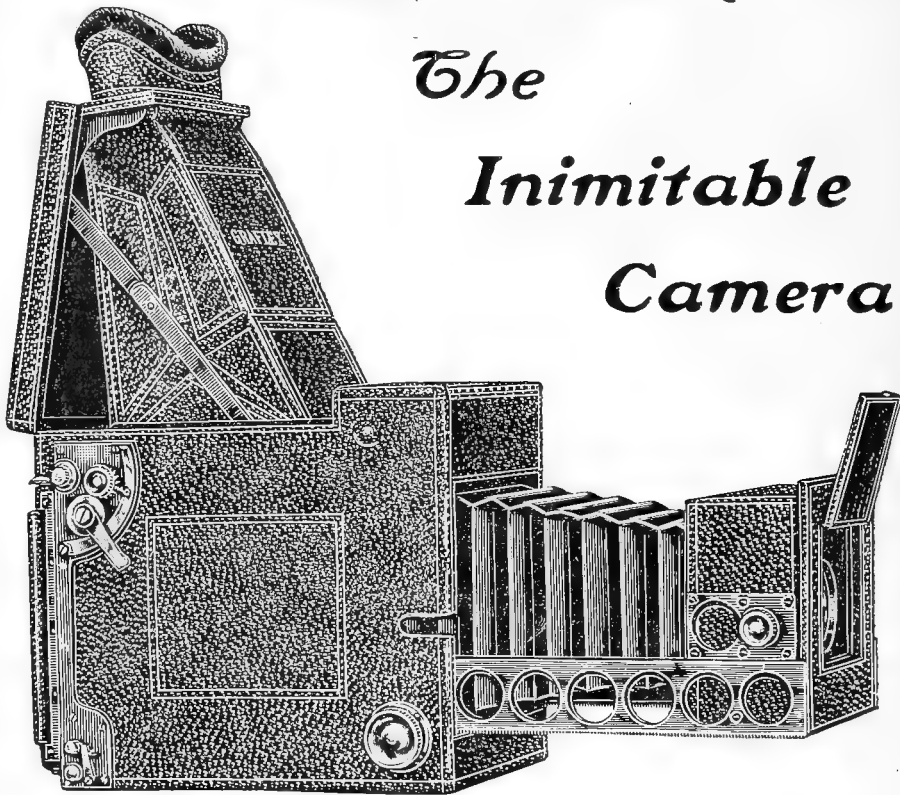
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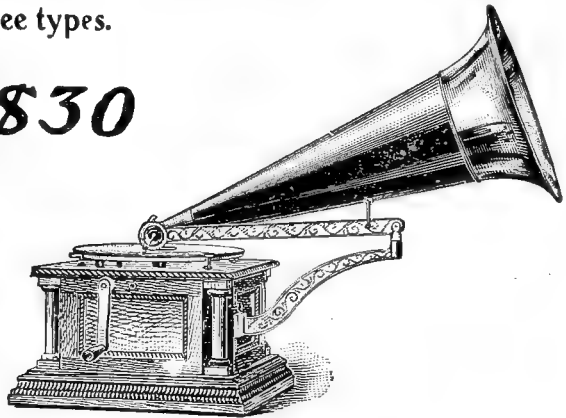
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We have on hand a number of questions which will be answered in our next issue. They were received too late to receive attention in this number. Our forms are made up on the 10th of the month for the month following, and material received on or after that date is too late to appear in that month.

We wish our subscribers to remember that we appreciate any efforts that they may make in our behalf, either in the matter of material or by calling the attention of their friends to our magazine. We have no doubt that every one of our subscribers has several friends who would be glad to subscribe if it could be brought to their notice. Each new subscriber gets a copy of the "Chippy Family," and you get one of "Preparing Breakfast," for each subscriber that you obtain.





AMERICAN BIRD MAGAZINE, Worcester, Mass.

THE BLUE BIRD.

Welcome back from your southern trip

Little friend of the dark blue coat,
I hear your song in orchard trees
And long have waited for its note.

The snow has piled my window pane
And winds of winter fiercely blown,
Since you forsook the bosky dell
You claimed for one sweet summer home.

Did others in that distant land
So love to hear your morning song?
Did no fair maiden try to steal
The score that you have sung so long?

You may have friends that love as well
Your sweetly trembling song of praise,
But none that welcome more than we
Your coming in the springtime days.

All hail, sweet songster of the glen
No prince that comes from o'er the sea
Can claim the freedom of our fields
Such as we gladly yield to thee.

H. G. LESLIE.



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Chas. A. Reed

AMERICAN BIRD MAGAZINE, Worcester, Mass.

Photographed from life by Chester A. Reed.

PREPARING BREAKFAST.

[CHIPPING SPARROWS.]



OUR WINTER BIRDS.



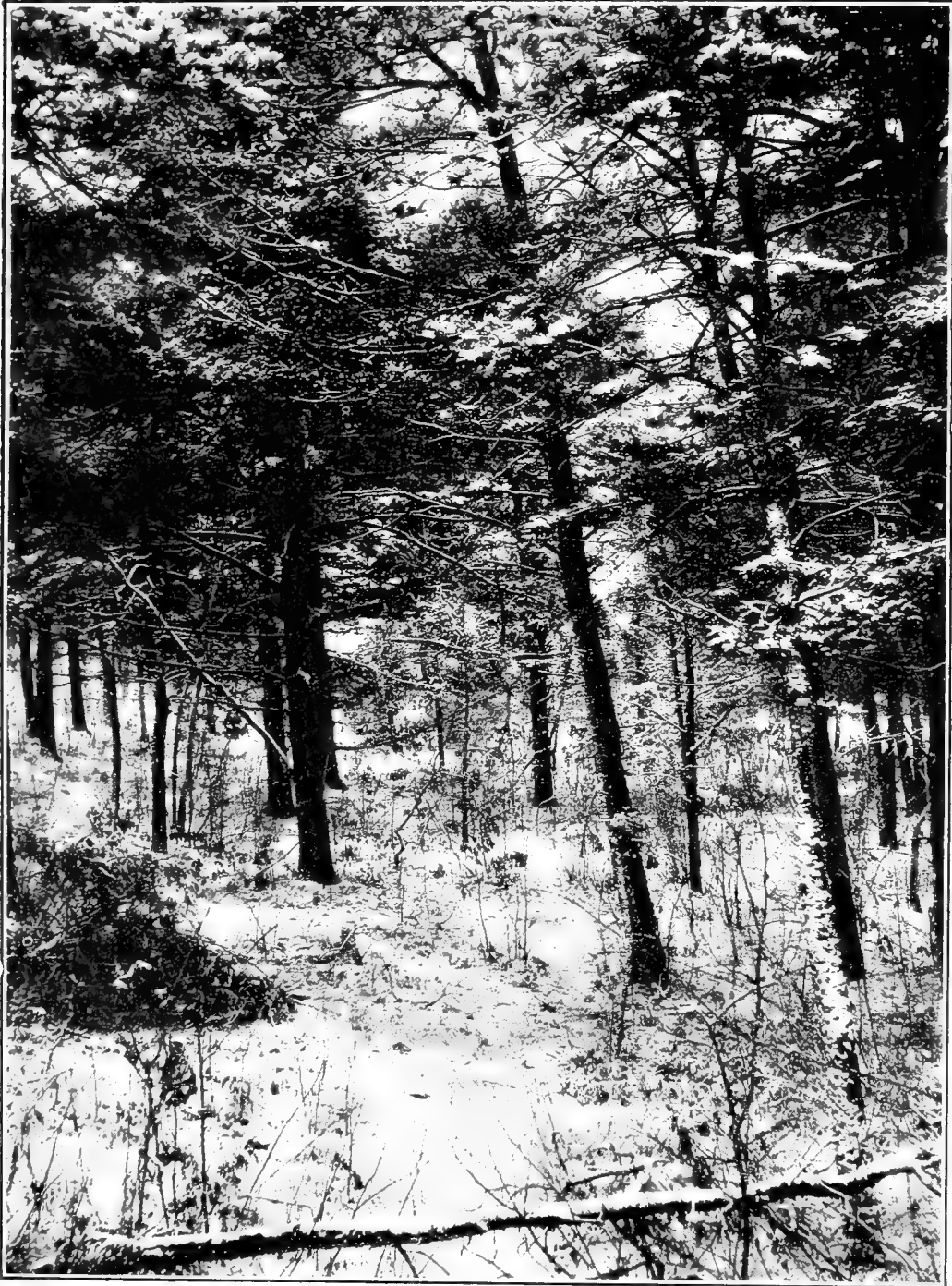
BIRD life in winter, as at all times, is very interesting, and the various members which constitute the group left with us after the departure of our summer visitors, receive more notice as a rule, because so many of our feathered friends have disappeared, and because there are not so many other attractions.

How cheering it is—when the fields are brown and bare, the trees stripped of their foliage, vegetation dead and withered, the ground hard and frozen, and perhaps snow flakes falling—to see some happy, active member of the bird family searching for food and occasionally pouring out a song that almost melts the rigor and desolation of the winter season. Many of our winter birds depend for food upon the seeds of various weeds and plants, and should these be covered over by deep snow, they frequently experience want and sometimes starvation. On such occasions many species which are otherwise shy and retiring come around the homes of man searching for food. Then is our golden opportunity to extend the protection and shelter

due them, besides enjoying the privilege of becoming more closely acquainted with them and learning more of their ways.

During the milder days, and indeed on some very stormy and bleak ones, we are greeted with the hearty song of the Song Sparrow, who seems to possess the happy faculty of enjoying life under all conditions. Only little brown sparrows, yet they furnish us with some of the sweetest bird music, and at a time of year when you might least expect it. They reside with us throughout the year and may be observed almost any time along the road sides or in fields and clearing and along the borders of woodlands. The writer has frequently observed these Sparrows—one or more—in some sheltered locality scratching among the leaves similar to our domestic fowls, but with a quick backward motion, apparently moving both feet at once.

AMERICAN ORNITHOLOGY.



OUR WOODS IN WINTER.



SLATE-COLORED JUNCO, (SNOW BIRDS.)

Closely connected with the Song Sparrow, and often feeding in company with it, may be mentioned the Junco or Snow Bird. These welcome little visitors return to us from their northern haunts in the latter part of Autumn and remain with us until about the middle of April. They usually associate in small flocks and are readily distinguished, especially in flight, when the white tail feathers show in sharp contrast to the dark slate color of the upper portions of the body. During severe winters little groups of Snow Birds and Song Sparrows may be seen hopping around our porches looking for food, and occasionally the little band is joined by one or two Chickadees. What a pretty sight, with the pure whiteness of the snow for a back-ground. Chickadees are also quite common during the winter, and their cheery "Chick-a-dee-dee" may be heard in the tree-tops on many a dreary day. They are somewhat like the Wrens as far as restless activity is concerned. Their plumage is a pretty mixture of blue, black and ashy grey. Closely allied with the Chickadees are the Nuthatches and Sapsuckers, and their pleasant notes do one good when there are so few of our feathered friends to be met with. These three species confine themselves more closely to the woods in summer and are not so frequently seen, partly on account of the thick foliage and their alertness during the nesting season. Occasionally we are favored with a visit from the Cardinal

Grosbeak during the winter months, and the writer has on several occasions seen them in the vicinity of our dwelling and has heard their clear, mellow whistle ring out on the wintry air. Truly beautiful—one of these splendid red birds sitting on an evergreen branch, the latter bowed down with a mantle of snow, which sparkled in the sun-light like a thousand glittering gems.

These are a hardy species and sometimes remain all the year, and I have also observed one or two stray robins and black birds as late as December. Another interesting winter visitor is the Winter Wren, which may be seen in the woods hopping around piles of cord wood, lumber, brush piles and other such places. The writer has also observed them on several occasions in the wood-pile in the rear of our village yard. In and out, up and down, over and under, they go with ceaseless activity, creeping through knot holes, and peeking into every nook and cranny. Aside from this they are gifted with a beautiful and varied song which has captivated bird lovers, and which has been referred to in beautiful language by Audubon and others.

Still another winter resident is the pretty little goldfinch. On mild sunny days especially does he make his presence known, and frequently bursts out in a melody of song which carries the thoughts of the listener back to summer days of warmth and flowers. At other times they simply utter a sort of warbling note during their undulating flight.

The American Crow is also a resident throughout the year, and during winter may be seen flying in long lines to and from their feeding grounds. They are said to fly many miles daily to a good feeding locality, always returning at night to an established roost. At this time of year they become more daring and often come within close range of our houses and barns. The Meadow Lark, while it usually stays further south, is sometimes met with during the winter, and like the Gold Finch, will suddenly surprise you by uttering its clear, sweet call from some field or orchard. They congregate in numbers during the winter months amongst the marshes of the lower Delaware.

The Carolina Wren is also a resident and frequents woodlands and bushy places, generally near water. They are sometimes called mocking wren owing to the great variation in their vocal powers. Now you hear them in a brush pile, then the sound may come from an old log or cord-wood—while at other times—like the Indigo Bird—they will mount the loftiest branch of a tall tree and pour forth their song with spirit and energy. They are rather shy and are more easily heard than seen. Several species of Hawks are also to be met with. The writer has observed the Sparrow Hawk, Chicken Hawk and Red-tail Hawks; the latter being quite numerous in the vicinity of West Ches-

ter, Penn. They soar to a great height and then sail steadily along—sometimes circling—with wings out-spread and motionless, after the manner of the Turkey Buzzard.

While not considered a “winter bird,” our much loved Blue Bird makes its appearance so far in advance of the rest of the birds, that we might class it as a connecting link between our “winter birds” and those of the early spring migrations. They are frequently observed while the weather is yet severe and long ere the snow has departed. There are many more birds known to be winter residents throughout the State, but it is the object of this article to only include those with which we are more closely acquainted.

THE NUTHATCH FAMILY.

BIRDS OF THE INVERTED POSITION.

BY LEANDER S. KEYSER.

There are a number of climbers in the bird realm, but none are quite so expert as the Nuthatch, which may be regarded as a past master in the art of clambering. The woodpeckers amble up the boles and branches of trees, and when they wish to descend, which they do occasionally for a short distance, they hitch down backward. The Brown Creepers ascend their vertical or oblique walls in the same way, but seldom, if ever, do anything else than clamber upward, never descending head downward after the fashion of the nuthatches.

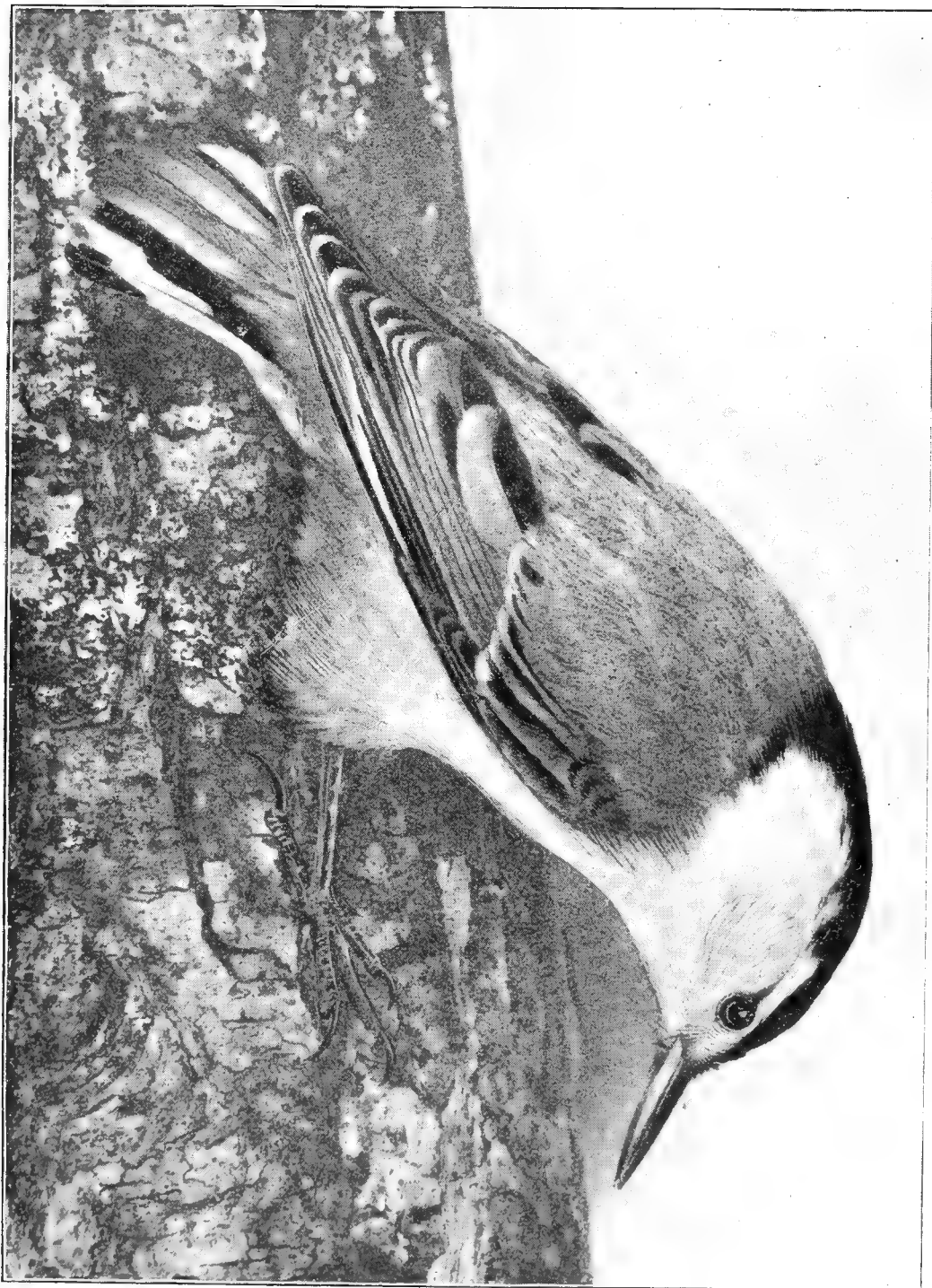
A little bird that comes very near disputing the palm with the Nuthatch as a sylvan coaster is the Creeping Warbler, which flits about over the tree-boles in all kinds of attitudes, even with his dainty head pointed toward the earth. No fear in his little striped breast of the blood rushing to his brain. However, even this clever birdlet's dexterity is not quite equal to that of the Nuthatch, for the latter is able to climb up and down a smoother wall than his little rival. More than that, the Nuthatch glides downward with more ease and aplomb and in a straight line, and does not fling himself from side to side as the Warbler does. Indeed, the Warbler's favorite method of going about is with his head directed toward the sky rather than the reverse, while it really seems that the Nuthatch's predilection is to scuttle about in an inverted position. Does he wish to chisel a grub out of the bark of a tree? He usually stands above the target at which he aims, so that he can deliver his blows with more force, just as the human woodchopper prefers to take his position above and not below the stick or log upon which he expects to operate. There the bird clings to his shaggy wall pounding away with might and main until you fear he will shatter his

beak or strew his brains on the bark. Sometimes, too, he thrusts his long slender beak into a crevice and pries with it in a way that threatens to snap it off in the middle.

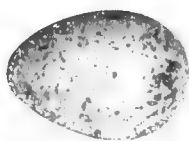
The writer has elsewhere described the Nuthatch's manner of clinging to his vertical perches as he makes his descent, but it will do no harm to describe the interesting process again, especially in a monograph on the Nuthatch fraternity. Our bird does not, as many have supposed, keep his feet directly under his bosom and pointed forward. That would be an extremely awkward method of locomotion. It would cause his heavy breast to tilt forward and go bumping along over the rough bark. No, nature does not do her work in so clumsy a fashion. Besides, you cannot imagine how a Nuthatch could move out of his tracks without losing his hold, with both feet directly under him and his tail pointed toward the sky, he could neither put one foot before the other, or loosen the grasp of both feet at once.

So he must perform his little exploit in some other way. This is the process: One foot is thrust forward and slightly to one side, the sharp hind claw penetrating the bark and holding firmly; the other foot is flung backward and somewhat to the opposite side, and is turned with the fore toes outward, the claws gripping the bark with a strong clutch. Thus, with his feet spread so far apart, the little gymnast makes a wide base beneath him outside of which the center of gravity can never fall. He therefore stands solidly balanced on his upright wall. At the same time he is able to cling firmly, and yet loosen and tighten his hold as he lists, moving downward in his smooth and agile way in little leaps or hitches. Again and again I have seen him performing his feat in this way as he descended a tree-trunk or the vertical side of a brick wall. Mr. Frank M. Chapman writes me that his own observations corroborate the foregoing conclusions. Yet thus far no bird artist has drawn the Nuthatch making his descent in the manner described.

All the foregoing delineations have related only to the white-breasted Nuthatch (*Sitta carolinensis*), but it is fair to presume that all the other members of this sub-family make their descent in the same fashion. The Woodpeckers and creepers use their spiny tails as supports while stationary or in motion; not so the Nuthatches, which are sufficiently nimble on their feet to stand or glide without converting their caudal appendages into braces. Odd as it may seem to the uninformed, the Nuthatches belong to the order of passerines or perching birds, in spite of their creeping habits. The systematists have placed them in this niche of the avicular scheme, not only because they are able to perch like other passerines on twigs and small branches, but also because they have the foot of the true perching bird, with three toes in front and one,



WHITE-BREASTED NUTHATCH. (Life size.)



well developed, in the rear. In this respect they differ again from the Woodpeckers, which have either two fore and two hind toes, or two in front and only one behind. This will appear all the more remarkable when it is remembered that the *Picidæ* do not descend head downward at all, while the *Sittinæ* are the head-downward goers par excellence, and yet have only one rear toe to support them in their inverted position. You would naturally suppose that if any bird had need of two hind toes, it would be the Nuthatch; but the result proves that, after all, nature had her wits about her when she evolved this avian family.

The world over, there are twenty distinct species of Nuthatches known to scientific observers, only four of them being natives of America. Of course, there are a number of sub-species or varieties. All of them are incessant climbers and foragers, peering into crannies, pounding here and there to make the grubs stir in their hiding-places, jabbing and prying with their beaks, and chiseling out all kinds of larvæ, grubs and borers that would, if permitted to live and multiply, soon devastate the timber and fruit trees and make this world a desert indeed. True, the other feathered clamberers and carpenters are fully as useful, but depend upon it, the Nuthatches do their share in preserving our forests and orchards.

The White-breasted Nuthatch is our most common species east of the great plains, breeding from the Gulf States to the northern border of the United States and to New Brunswick. One peculiarity about him is that he breeds throughout his range, and therefore may be found as both a summer and winter resident in all suitable localities within the boundaries mentioned above. In the winter, no matter how old Boreas may bluster, our bird is one of the most cheerful denizens of the woods in our central latitudes, calling his nasal *yank, yank, yank*, and sometimes indulging in a loud, half-merry outburst that goes echoing through the woodlands. No sound of the sylvan solitudes has a more woodsy flavor or is more suggestive of vernal cheer and good will. Sometimes he chatters to his human visitors in the most cordial tones as he glides up and down his arboreal promenade, or holds himself almost straight out.

A hole in a stump or tree makes Madame Nuthatch a cosy nursery, which she lines with feathers and leaves, making it soft and snug for her downy brood. Here they are safe from most of the prowlers that find the more exposed nests of many other birds. She deposits five to eight eggs of a white or creamy-white ground-color, speckled with rufous and lavender. During the season of incubation and brood-rearing the Nuthatches retire to the depth of the woods, and are quiet, secretive and unsocial, seldom betraying their procreant secrets.



PYGMY NUTHATCH, (LIFE SIZE.).



These birds have another habit that is worth mentioning. Having found a larger supply of food than they require for their immediate use, they carry morsels away and jam them into all sorts of holes and cranies in the bark of the trees. I have watched a pair for an hour diligently laying by a store of sunflower seeds, which they had found at the edge of the woods. They do not store a quantity of provision in one place like the squirrels, but deposit a tidbit here and there, wedging it tightly into a crevice by hammering it with their stout bills. Of course, the Woodpeckers and Tomtits secure many of these half-hidden goodies, but Master Nuthatch does not mind that, for he evens up the theft by appropriating their stores when he finds them. The motto, "All that I find is mine," is obviously in accord with the ethical code of the bird world. For two winters a Nuthatch remained in the vicinity of my house, coming almost daily to dine at the outdoor table I spread for my feathered visitors; but the third winter he did not once appear, and no other member of the family came to take his place at the birds' banquet. Mayhap he met with disaster, and left no last will and testament to any of his relatives.

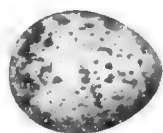
The white-breasted Nuthatch may be known by his flat body and broad shoulders, his bluish-gray coat, black cap and mantle (all in one piece,) white tie, shirt bosom and vest. with a few rufous decorations on the belly and under tail-coverts. The following quotations from Wilson are given as much for the vivacious manner in which the story is told as for the story itself:

"The male is extremely attentive to the female while sitting, supplying her regularly with sustenance, stopping frequently at the mouth of the hole, calling and offering her what he has brought, in the most endearing manner. Sometimes he seems to stop merely to inquire how she is, and to lighten the tedious moments with his soothing chatter. He seldom rambles far from the spot, and when danger appears, regardless of his own safety, he flies instantly to alarm her. When both are feeding on the trunk of the same tree, or of adjoining ones, he is perpetually calling on her; and from the momentary pause he makes, it is plain he feels pleased to hear her reply.

"He rests and roosts with his head downwards; and appears to possess a degree of curiosity not common in many birds; frequently descending, very silently, within a few feet of the root of the tree where you happen to stand, stopping, head downward, stretching out his neck in a horizontal direction, as if to reconnoiter your appearance, and after several minutes of silent observation, wheeling around, he again mounts, with fresh activity, piping his unisons as before. . . . Some-



BROWN-HEADED NUTHATCH, (LIFE SIZE).



times the rain, freezing as it falls, encloses every twig, and even the trunk of the tree, in a hard, transparent coat or shell of ice. On these occasions I have observed his anxiety and dissatisfaction at being with difficulty able to make his way along the smooth surface; at these times generally abandoning the trees, gleaning about the stables, around the house, mixing among the fowls, entering the barn, and examining the beams and rafters, and every place where he may pick up a subsistence.

“The name Nuthatch has been bestowed on this family from their supposed practice of breaking nuts by repeated hatchings, or hammerings, with their bills. Soft-shelled nuts, such as chestnuts, chinkapins, and hazelnuts, they may probably be able to demolish, though I have never seen them so engaged; but it must rather be in search of maggots that sometimes breed there than for the kernel.”

It is a mistake, however, to suppose that the white-breast is not fond of the kernels of nuts, for my winter visitor previously referred to was extremely partial to the “goodies” of the cracked walnuts and hickory nuts with which I supplied his table. He would sometimes eat them from the board itself; at other times he would fly to a wall or a tree, wedge his morsel in a cleft or pocket, hammer it into small bits, and devour it with great relish, so that I could imagine him smacking his lips.

Our charming white-breast has a little cousin called the red-breasted nuthatch (*Sitta canadensis*,) whose under parts are rufous or reddish-buff instead of white. His crown and nape are black, then a white band runs back from the base of the upper mandible to the hind neck, and below this a black stripe reaches back in a parallel direction and encloses the eye. His upper parts, save those mentioned, are bluish-gray. He is considerably smaller than the white-breast, and his range is more northerly in summer; but, unlike his cousin, he does not breed throughout his range; only in the localities which he selects for his summer home. Hence he is a migrant, dwelling in winter in the Southern states, and in summer in the latitude of Manitoba and Maine and northward, and also on the summits of the mountains as far south as Virginia. It will be seen that the breeding precincts of the two species overlap, while in winter *canadensis* comes down from the north and takes up his abode in the southern part of the demesne of *carolinensis*.

While the white-breast is partial to oak, beech, maple and other deciduous forests, his little relative prefers a woodland of pine, being very fond of scampering about on the cones, clinging to them with his strong claws, and extracting the seeds with his stout little bill.

His call, though much like the yank of the white-breast, is pitched to a higher key and has even a more pronounced nasal intonation, sounding as if he had caught a bad cold. Besides he gives expression to some cheery notes that seemed to be reserved for his own family or exclusive social circles. I found these pretty nuthatches in the pine woods on Mackinac Island in mid-summer, and have good reason to believe that they breed there.

Cavities in trees or stumps furnish the red-breasts with nesting places suited to their taste; but, differing from the preceding species, they have a cunning way of plastering the entrance above and below with pine pitch, so as to make it just large enough to admit their tiny bodies and yet too small to admit their enemies. In this respect they steal the laurels from their white-breasted kinsmen, who seem to have no means by which to lessen the dimensions of their natural doorways.

A still smaller member of this group is the brown-headed nuthatch (*Sitta pusilla*), a resident of the South Atlantic and Gulf States, wandering "accidentally" as far north at rare intervals as New York and Missouri. A daintily dressed little fellow is this bird, the top and back of his head being a dark grayish brown, with a whitish patch on the nape, while the rest of his upper parts are bluish-gray and his under parts grayish-white. His favorite dwelling places are in the pine woods of the south, where he is on the most cordial terms socially with the pine warbler and the red-cockaded woodpecker. A most active little body, he scampers about from the roots of the trees to the terminal twigs at the top, inspecting every cone, cranny and knot-hole, chirping his fine, high-keyed notes, sometimes in a querulous tone, and again in the most cheerful and good natured temper imaginable, now gliding up a tree-trunk, now scudding down head foremost, and anon circling in a spiral course.

One autumn I found a number of these nuthatches associated with a flock of myrtle warblers on the most sociable terms in a pine woodland not far from Pensacola, Florida. Now they were up in the trees, now down on the ground. All the while they were chirping in their most genial tones. In a spring jaunt to southern Mississippi I was fortunate enough to find a nest in a half-decayed snag. It contained four of the prettiest half-fledged bird babies that have ever greeted my sight.

Oddly enough, our tiny clamberers utter a loud, shrill alarm call that bears close resemblance to the querulous protest of the sparrow hawk as you approach her nest or young. Mr. Frank M. Chapman says of the brown heads. "They are talkative sprites, and, like a group of school children, each one chatters away without paying the slightest attention to what his companions are saying."



RED-BREASTED NUTHATCH.

NOTE—By an oversight the above "red-breast" was printed in yellow. It should be red.

The fourth member of the *Sittinæ* sub-family in America is the pygmy nuthatch, known scientifically as *Sitta pygmæa*, a genuine westerner, not known east of the plains. However, in the Rocky Mountain district he is an abundant species, his range east and west being from the plains to the Pacific coast and north and south from the Canadian boundary to the mountains of Mexico. Swinging and gliding about among the pines, performing the same antics as his eastern kinsmen, he utters a cheery whistle, that may be translated, "whit, whit, whit." His movements are often so rapid that he is difficult to follow with the eye as he flits from one tree to another or dashes amid the branches. He scarcely remains quiet long enough for you to note his markings and settle his identity, but once you are sure of him, you will never mistake him for another bird.

In Colorado there is little of a migratory movement even up and down the mountains among these interesting birdlets. In the winter a few descend from the heights and dwell on the plains, where the weather is not so rigorous. On the approach of spring they again hie up into the mountains, spending the summer there and rearing their pretty bairns. However, the majority of them remain in the mountains all winter, braving the bitterest and fiercest storms often at an altitude of 8,000 feet. Their breeding range is from 6,000 to 10,000 feet, the latter elevation being only a little below timber line.

Spite of his unique and interesting habits, the poets have scarcely begun to chant the praises of the American nuthatch. One of the best tributes I have been able to find is from the pen of Edith Thomas, who apostrophizes our bird in this way:

"Shrewd little haunter of woods all gray,
Whom I meet on my walk of a winter day,
You're busy inspecting each cranny and hole
In the ragged bark of yon hickory bole;
You intent on your task, and I on the law
Of your wonderful head and gymnastic claw!
The woodpecker well may despair of this feat—
Only the fly with you can compete!
So much is clear; but I fain would know
How you can so reckless and fearless go,
Head upward, head downward, all one to you,
Zenith and nadir the same to your view."

We have now described the American nuthatch quartette, and will turn to other fields no less inviting, albeit more remote. The nuthatch of central Europe, scientifically known as *Sitta cæsia*, is closely related

to our Americans forms, resembling them in many of his habits. In studying the literature of trans-Atlantic species we at once stumble upon the reason for calling this avian family by the somewhat peculiar and apparently inapt name of nuthatch. The older English form of the word was "nuthack," which unfortunately has been changed to "nuthatch," a word that gives an erroneous impression, for no bird ever hatches a nut. But with the last syllable "hack" the difficulty is all cleared up, as his habit of hacking or chipping nuts, which he places in chinks of the bark or wall, is well known.

The nuthatch of England belongs to the species just named. He does not wear a black hood or mantle, but merely a black ribbon on the side of his head, enclosing the eye. His upper parts are bluish-gray, save the outer tail feathers, which are black; his cheeks and throat are white, his breast and belly buff, and his flanks and lower tail-coverts chestnut red. A graphic English writer, Dr. W. H. Hudson, gives the following enthusiastic description of the little tobogganist of his native woodlands:

"When I see him sitting quite still for a few moments on a branch of a tree in his most characteristic nuthatch attitude, on or under the branch, perched horizontally or vertically, with head or tail uppermost, but always with the body placed beetle-wise against the bark, head raised, and the straight, sharp bill pointed like an arm lifted to denote attention. At such times he looks less like a living than a sculptured bird, a bird cut out of beautifully variegated marble—blue gray, buff and chestnut, and placed against the tree to deceive the eye. The figure is so smooth and compact, the tints so soft and stonelike; and when he is still, he is so wonderfully still, and his attitude so statuesque! But he is never long still, and when he resumes his lively, eccentric, up-and-down and side-wise motions, he is interesting in another way. He is like a small woodpecker who has broken loose from the woodpecker's somewhat narrow laws of progression, preferring to be a law unto himself.

Without a touch of brilliant color, the nuthatch is a beautiful bird on account of the pleasing softness and harmonious disposition of his tints; and, in like manner, without being a songster in the strict sense of the word, his voice is so clear and far-reaching and of so pleasing a quality, that it often gives more life and spirit to the woods and orchards and avenues he frequents than that of many true melodists. This is more especially the case in the month of March, before the migratory songsters have arrived, when he is most loquacious. A high pitched; clear, ringing note, repeated without variation several times, is his most often-heard call or song. He will sometimes sit motion-

less on his perch, repeating this call at short intervals, for half an hour at a time. Another bird at a distance will be doing the same, and the two appear to be answering one another. He also has another call, not so loud and piercing; but more melodious: a double note, repeated two or three times, with something liquid and gurgling in the sound, suggesting the musical sound of lapsing water. These various notes and calls are heard incessantly until the young are hatched, when the birds at once become silent.

The nesting habits of *cæsia* are quite similar to those of our American forms, with the following interesting exception. The doorway of the cavity constituting the bird's domicile is plastered up with clay, made viscid by the nuthatch's glutinous saliva, leaving in the center a circular hole just large enough to afford entrance and exit for the little owner. Says the author quoted above: "When the sitting bird is interfered with, she defends her treasures with great courage, hissing like a wryneck, and vigorously striking at her aggressor with her sharp bill." Like our common white-breast, the British bird may be attracted to human dwellings by furnishing him a regular supply of food suited to his taste, and may grow so trustful as to come when called, and even to catch morsels thrown to him in the air. In the forest he often hammers so loudly on a resonant branch that his tattoo is mistaken for that of a woodpecker. The interior of the nest "contains a bed of dry leaves, or the filmy flakes of the inner bark of a fir or cedar, on which the eggs are laid."

In northern Europe another form of the nuthatch guild is found, and is known scientifically as *Sitta europea*, whose under parts are white without any washing of buff on the breast. It will thus be seen that the geographical difference is just the reverse in the two types of nuthatches in America and Europe; while with us the white-breasted nuthatch occupies the central latitudes and the red-breast the more northern, in Europe the precise opposite prevails.

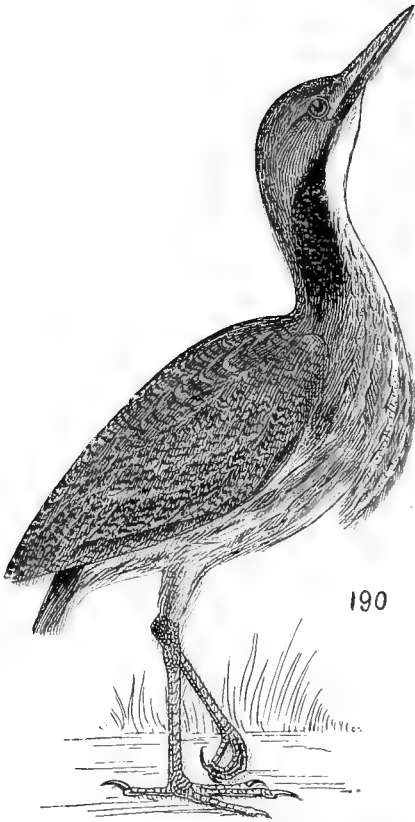
The Levant furnishes a most charming addition to the feathered brotherhood now under consideration. The scientific gentlemen have christened it *Sitta syriaca*, and its common name is the rock nuthatch, an appellation that is most appropriate, for its chosen haunts are rocky cliffs, over the faces of which it scuttles in the most approved nuthatch fashion, head up or down, as the whim seizes it, clinging with its sharp claws to the chinks, ledges, protuberances and rough surfaces of the rocky walls. A little larger than its European cousin, its markings are quite similar. In Syria it is common as far north as the southern

shores of the Black Sea. Although somewhat shy, it is described as having "sprightly manners and a clear, ringing trill." Odd indeed are some of nature's evolutions, I had almost said caprices, for the rock nuthatch is just as much at home and apparently just as happy on its bleak precipices as is our merry white-breast in his umbrageous home in the oak or maple forest.

But what kind of nests do the rock nuthatches construct on their limestone walls? That is one of the most interesting features of the life of these birds. One writer who has observed them in their native haunts describes the rock nuthatch as "an expert clay mixer and moulder." The bird does not chisel out a nursery in the rock—no, indeed; his method of constructing his nest is as follows: Having found a little hollow or indentation on the rocky wall, he will erect a cap or dome of mortar over it, plastering the structure so firmly against the surface that no rain or storm or predacious creeping thing can demolish it until long after it has been abandoned by the little architect. The circular base of the nest is ten or twelve inches in diameter. The dome is not entirely closed up, but a small orifice is left in the center, upon the edges of which a narrow neck or funnel, also made of mortar, is raised, the hole just large enough to admit the body of the bird. The funnel is about three inches long.

The building material employed is fine clay softened and glutinated with the bird's saliva and mixed with plant fibers, for the little mason does not believe in making bricks without straw. So well packed is the inch-thick wall that a stiff knife blade must be used to cut through it. While the natural color of the adobe cottage is ash gray, and therefore harmonizes with the general hue of its surroundings, and also with the mezzo-tints of the builder, yet he sometimes decorates it with the gaily colored wings of moths caught in the chase and attached to the plaster while it is fresh. The rock nuthatch is as expert a mixer of mortar as the well known cliff swallows of our own country, and his adobe dwellings bear a close resemblance to theirs.

It is interesting to note that the European nuthatch, while nesting regularly in tree cavities, sometimes also chooses the crannies of rocks, when he goes a little more extensively into the plastering business; but his skill is not so well developed as that of his oriental cousin, whose mud cottage is a model of its kind.



No. 190, American Bittern (*Botaurus lentiginosus*.)

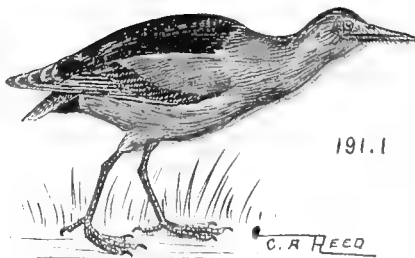
Found throughout temperate North America. South in winter to Cuba and Central America. Length about two feet. Upper parts brownish variegated with black barrings and lighter edges to the feathers. Under parts and the feathers of the breast which are lengthened, are buff colored and striped with brownish. Throat pure white and a black patch on either side of the neck. Bill and feet greenish. Young birds have the same variegated appearance but the markings are rather finer, the lengthened feathers on the breast are shorter and the black patches are very small or wholly lacking.

No. 191, Least Bittern, (*Ardetta exilis*.)



Temperate North America to the British Provinces and south to South America and the West Indies. Crown, which is slightly crested, and back black; back of neck, secondaries and lesser coverts chestnut; other coverts and sides of neck brownish yellow. Bill and feet greenish yellow. Inhabits swamps in common with several species of rails and is thus not so often seen although they may be in a given locality. Length, 12 in.

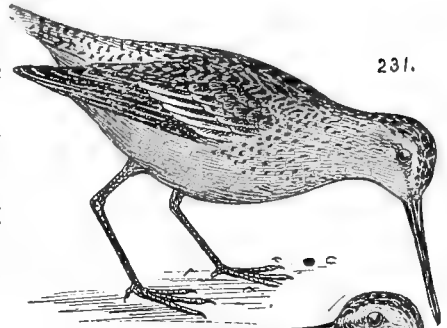
No. 191.1, Cory's Least Bittern, (*Ardetta neoxena*.)



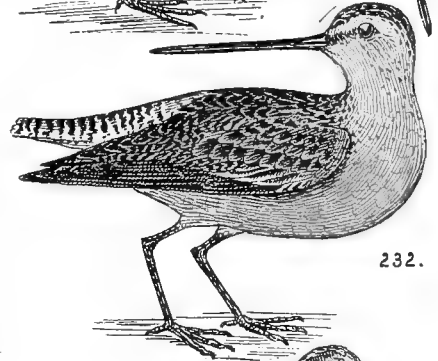
Southern Florida. Accidental at Ontario and Michigan. Very rare and few have ever been seen. Length 13 in. Top of head, back, primaries and tail, glossy black. Remainder of plumage nearly uniform reddish brown. Feet, legs, bill and bare space about the eyes, greenish yellow.

No. 231, Dowitcher, (*Macrorhamphus griseus*.)

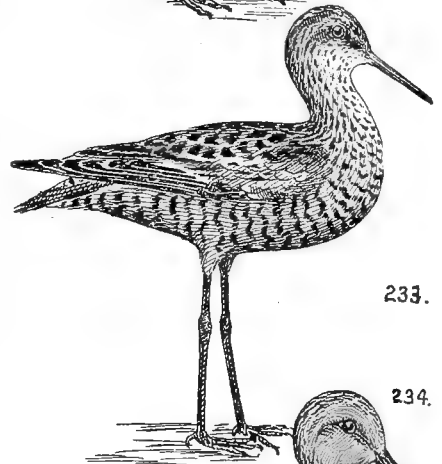
Eastern North America, breeding in the extreme north and migrating in winter to the West Indies. Adults in summer: Both upper and under parts a rich rusty red, the former being heavily varied with black. Rump white; tail black, barred with white. In winter: Dark gray above, the feathers having lighter edges; below whitish washed with dusky; the flanks with dusky bars. Rump white. Length, about 11 inches. Called Gray Snipe in winter.

No. 232, Long billed Dowitcher, (*Macrorhamphus scolopaceus*.)

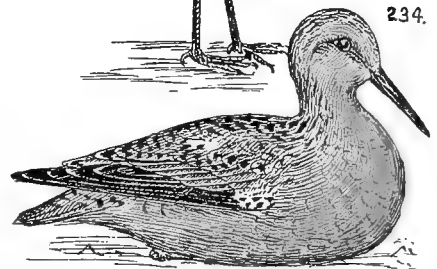
Breeds in Alaska and along the Arctic coast, migrating in great numbers through the western parts of the United States including the Mississippi Valley to Mexico. The coloration of this species is almost precisely like the last the distinguishing point being the length of the bill. In the eastern form the bill averages 2.30 inches, while in the western it is 2.80 inches, thus being about a half inch longer.

No. 233, Stilt Sandpiper, (*Micropalma himantopus*.)

Distributed throughout eastern North America, breeding north of the United States and migrating to the West Indies and Central America. Length, 9 inches. Adults in summer: Above blackish, the feathers being edged with white and chestnut. Space back of the eye and line above bright chestnut. Under parts streaked on the throat and barred below with black and tinted with reddish brown. In winter the back is a dark gray, the feathers with white edges and the under parts are whitish, the throat and flanks being streaked with dusky.

No. 234, Knot, (*Tringa canutus*.)

Breeds in the Arctic regions and during the migrations is found throughout the United States, until it reaches its winter quarters in South America. Length 10.5 inches. Upper parts mottled with brown, black and white. Under parts and line over the eye, a uniform reddish brown. In winter the back is dark gray crossed by numerous black and white semi-circles. Under parts white tinged with grayish on the sides and also faintly streaked.

No. 244, Curlew Sandpiper, (*Tringa ferruginea*.)

A somewhat accidental species in this country, being an inhabitant of the old world. Occurs occasionally along the Atlantic coast and in Alaska. Upper parts brown with black markings; wings grayish; under parts uniform reddish brown. Upper tail coverts white heavily barred with dusky.

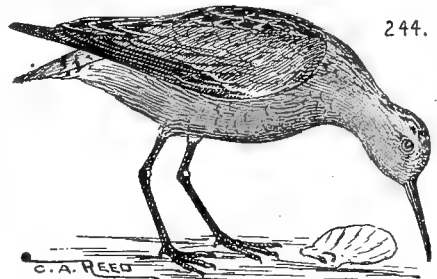




Photo by C. A. Reed.

NEST AND EGGS OF PRAIRIE WARBLER.

PRAIRIE WARBLER.

A. O. U. No. 673.

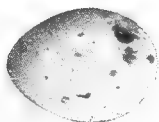
(Dendroica discolor.)

RANGE.

Eastern United States, north to southern New England and Michigan; breeds from Southern U. S. northwards, and migrates in winter to Florida and the East Indies.

DESCRIPTION.

Length, 4-5 in.; extent 6.5 in.; tail, 2 in. Upper parts greenish yellow with a number of reddish brown spots on the middle of the back. Below, bright yellow on the throat and breast and lightening and changing to greenish yellow on the flanks and belly. A black line through the eye and the sides of neck and flanks streaked with black. A yellow superciliary stripe and two yellowish white wing bars. The female is paler, has but a trace of the black markings, and lacks the reddish brown spots on the back.



NEST AND EGGS.

The Prairie Warblers build one of the most substantial and artistic nests of the whole family. It is very firmly attached in a crotch of a small shrub. It is skillfully woven with vegetable fibres and fine grasses and closely lined with hair. They nearly always nest in colonies and twenty-five or thirty pairs may sometimes be found nesting on a small plot of ground containing barely more than an acre. With hardly an exception, high, dry land seems to be chosen for a location.

They commonly lay four eggs but occasionally a set of five may be found. The ground color is practically white having but a very slight greenish tinge, and they are speckled chiefly in the form of a wreath around the larger end, with reddish brown. The sets are generally completed about the latter part of May or early in June. Incubation lasts about fifteen days and then the young are fed in the nest for about two weeks more. The young are very bright and active and have a way of keeping out of sight beneath the underbrush so that they are little seen. In the fall both old and young join in with the other members of the warbler family and migrate in their company. I think that all that survive of a colony both old and young, return to the same locality to nest each year and the bird town increases in population gradually until for lack of room some of them are compelled to seek new quarters.

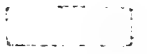


Photo from life by C. A. Reed.
PRAIRIE WARBLER (MALE FEEDING YOUNG.)

HABITS.

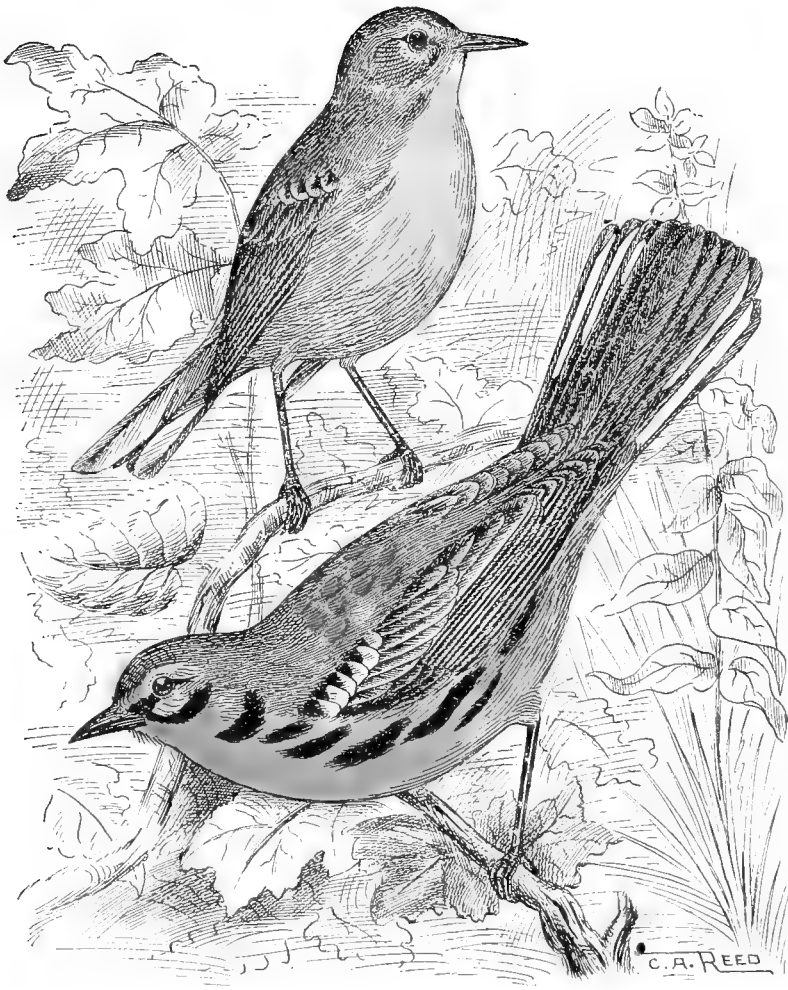


YOUNG PRAIRIE WARBLER.

ABOUT ten years ago, Prairie Warblers were very common in suitable places about Worcester. From then on they have gradually disappeared and for nearly ten years I know of no record of their having been seen. Two years ago, three pairs nested in a small hollow covered with scrub oaks, chestnuts, and barberry bushes. Last year there were at least a dozen pairs there. Why they ever left is a mystery; as far as we know, nothing was ever done to disturb them in any way, and nothing occurred to induce them to return again; yet here they are and they will always find a welcome as long as they care to remain. Like the other members of the warbler family, they are not blessed with musical voices to correspond with their beautiful dress, but their sharp,

jerky song has a business like air about it that commands attention. They seem to be very nervous and restless at all times, and rarely stay in one place more than a few minutes at a time, except perhaps during the nesting time, when the male is perched upon an outer dead branch of a pine tree, within sight of his home, and continually gives voice to his peculiar little song.

Although many pairs of these sprightly little birds may nest within a comparatively small area, each seems to have his own section and lookout tree, and many an exciting chase occurs when the head of one household encroaches on the domains of another; a flash of yellow is all that can be seen of the bewildering conflicts as they dash in and out among the underbrush, each one finally going to his own perch and crowing or rather chirping his victory. These petty warfares are all forgotten when any danger from an outside source threatens the home of any one of them. Then the whole colony appears as if by magic and joins in their common protest against the trespasser. Their nests are quite difficult to find as they are almost without exception built at the top of a low shrub, just at the point where the leaves cluster thickest, and as there are hundreds of shrubs that are just suited to their needs, and the nest can only be found by inspecting the tops of each individual bush, unless the female can be surprised, a feat that is not often accomplished.



PRAIRIE WARBLERS (MALE AND FEMALE.)

If any member of the bird world is capable of perpetrating and appreciating a joke, the writer now believes that this one can, having been the victim of several the past season. Having found and photographed one of their nests a year before, I was not especially anxious to find another and so paid little attention to them. A pair of them flitted by while I, watching another small bird, was partially concealed under a bush. As I glanced up the male disappeared in the top of a small shrub; a moment later he flew away and she in turn went to the same bush; this began to appear suspicious and a moment later when the male again appeared and went through the same performance, I was certain that they had a nest there. To satisfy my curiosity I went towards the place, both birds meanwhile chirping pitifully. When I had lifted the leaves which as I supposed concealed their treasures, and found nothing there, my surprise was complete. Not only this time, but on a number of other occasions was I thus deceived by these little black and yellow rogues. I have never heard that this was a common trait among this species, but all that I have met with seem to have been very proficient.

Another habit that they seem to have acquired in a marked degree, is that of prying into other folks affairs; they are inquisitive to the last degree. Several times I have tested this by hiding myself beneath a bush, and found that every bird in the colony would gather around and take turns in hopping down to peek at me. So matters ran for about two weeks; I made no systematic search or special effort to find one of their nests, but was always on the lookout for one when I passed through their township. Late one afternoon I was on my way home and was hurrying to catch a car. The path I pursued led right through their territory; as I was walking over a small walnut shrub a bird fell to the ground and fluttered along ahead of me. In my haste I had found what a more careful search would have failed to reveal. Seeing that her attempt to lead me away from the nest had been unsuccessful, the bird returned and scolded me as I stood looking at the treasures she had guarded so zealously. This nest was the most neatly woven of any I have ever found of this bird; it had a delicate lace like appearance that was very attractive. This is the nest that is shown here and is the one that I was most successful with in obtaining photos of the parents.

Summer before last, all attempts at bird photography, when applied to the Prairie Warbler were failures because of the unusual shyness of the birds. The varying emotions of different individuals of the same family, were well shown by the owners of the nest that we have just



PRAIRIE WARBLER.

Photo from life by C. A. Reed.

found. While the female was sitting, both she and the male were very watchful and the chances of the nest being found through any act of theirs, was very slim. If you were walking directly towards the nest she would quietly slip off through the sweet fern that formed the lower strata of vegetation; if your course lay a little to either side she would hug closer to the nest and let you go by even if within two or three feet, in either case leaving you wholly unaware of its existence. As soon as the little warblers had hatched, the parents seemed to have little fear and would feed their charges while you were watching.

When bringing food for their young they approached the nest cautiously, keeping near the ground where the swaying of the fern tops would show their progress until a slight tremor of the young walnut announced that they had reached their goal and a moment later they would hop to the edge of the nest and administer an antidote for hunger to the little wide open mouths. All manner of insects are included in their menu. Ants, plant lice, flies, moths, and even repulsive looking worms such as the male bird has brought in one of the illustrations, all follow each other down the seemingly bottomless yellow caverns that are eagerly presented upon the parents return.

The young Prairie Warblers, as soon as they leave the nest are very smart little chaps and will successfully hide away under the leaves. One little fellow whose picture I was trying to take obeyed his parents commands even more literally than they had intended. I imagine from their excited chirpings and his actions that they were telling him to climb to the highest point of the bush so that he might have a good vantage point from which to begin his flight. Having reached the highest branch he looked about for something more elevated, which he found on the top of my head from which he made his maiden flight.

The good fellowship that exists between most of the different species of birds can be judged by the variety that nested in company with the Prairie Warblers. They included Indigo Buntings, Towhees, Wilson's Thrush, Brown Thrasher, Vireos, Black and White and Chestnut-sided Warblers, Field and Song Sparrows, a Chickadee, Bluebird and Scarlet Tanager. As a general thing this variety of birds lived together very peaceably, varying the monotony with an occasional set-to between two or more of them, these tilts being of no serious consequence and in no ways disturbing the social equilibrium of the community.

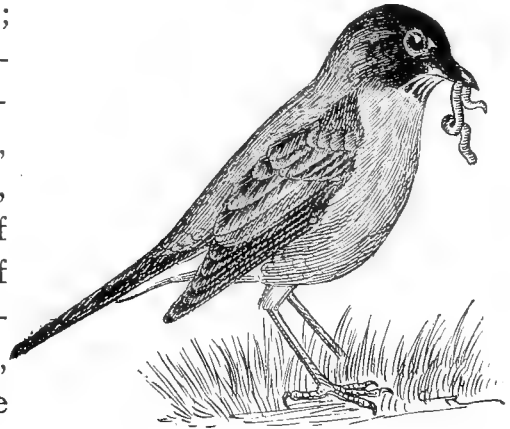


PRAIRIE WARBLER.

Photo from life by C. A. Reed.

BIRD FORAGERS.

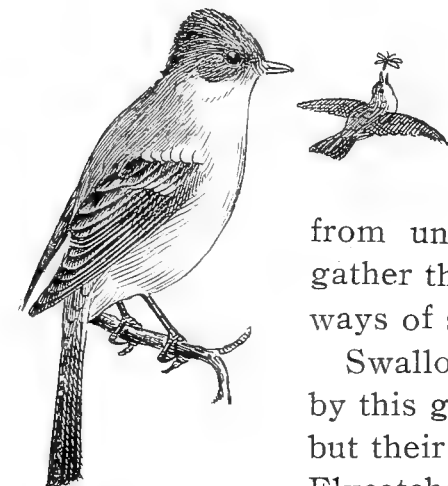
There is something curiously suggestive in the manner in which birds forage for their insect food. It would almost seem as though each species were intended to perform certain services in the economy of nature which could not be so well done by any other species; that instead of being pensioners upon man, the birds are really benefactors, giving more than they receive. Thus the Swallow tribes are the guardians of the atmosphere, which would otherwise swarm with immense quantities of minute insects; Woodpeckers, Creepers and Chickadees, are the guardians of the timber—of the forests; Sylvians and Flycatchers, of the foliage; Blackbirds, Thrushes, Crows and Larks, are the protectors of the soil; and Snipes and Woodcocks, of the soil under the surface. Each family has its respective duties to perform, and it is man's loss if he disturb the equilibrium by reducing the numbers of any species below the supply of insects afforded. The manner of foraging is widely different in the various families, and it is curious to note the assiduity with which insects are hunted in all stages of their existence.



In their larval state, those that lurk inside of the wood and bark are taken by Woodpeckers, and those under the soil by Snipe and Woodcock.

Insects when the larvae have assumed the form of moths, beetles and flies, are attacked by Flycatchers and Sylvians, and other small birds that take their food by day, and by small Owls and Whip-poor-wills by night.

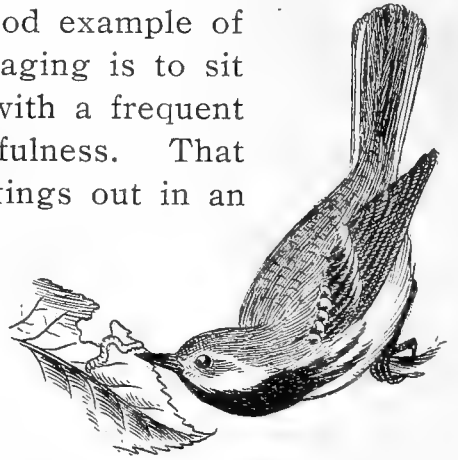
Birds that take their food chiefly from the surface of the ground, forage in a different manner from those that collect it from under the surface. Robins and Blackbirds gather their fare entirely from the ground, but their ways of seeking it are very different.



Swallows catch their food while on the wing, and by this give proof that they take only winged insects; but their manner differs essentially from those of the Flycatchers, which do not take their prey on the wing, but seize it as it passes by their perch.

Among the smaller birds the Kinglets and Gnatcatchers are remarkable for their diligence in hunting. They have a peculiar way of examining the foliage and blossoms rather than the surface of the branches, and their motions are very conspicuous upon the outer parts of the trees near the extremity of the twigs. The Gnatcatchers especially are exceedingly active and graceful, and take insects on the wing with wonderful dexterity. On the other hand, the Chickadee, Creeper, and Wren, seek their food while creeping round the branches, and take very little of it from the foliage. Round and round they go, seldom pausing in their circuitous course, and usually proceeding from the junction of the branches to their extremities, hopping from spray to spray, and then passing to another tree. As the Kinglets and Gnatcatchers confine themselves almost exclusively to examining the foliage, they go when the leaves fall; the bark protectors, however, remain long after the trees are bare, and not infrequently through the entire winter.

The Wood Pewee may be taken as a good example of the Flycatcher family. His manner of foraging is to sit on a twig, almost without motion but with a frequent movement of the head indicative of watchfulness. That he is not idle is shown by his frequent flittings out in an irregular circuit, and immediately returning to his perch with a captured insect. These salient flights are very numerous, and he often turns a somersault in the act of capturing his prey. He rarely misses his aim, and often collects from ten to fifteen insects of an appreciable size in a minute. Forming an intermediate genus between the Sylvians and Flycatchers, and partaking of the habits of each, are the Vireos. These birds are peculiar to America; and all are gifted songsters. Some of them, indeed, keep up a sort of intermittent singing even while hunting for their food. The Preacher Vireo especially seems to make warbling his principle employment. He is never, apparently, very diligent or earnest, but often stops during his desultory exhortation to seize a passing insect, and then resume his song.

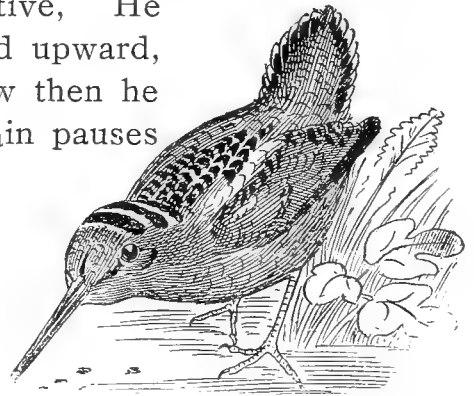


Among the natural guardians of the trees are the Woodpeckers, which gather their food as they creep round the tree trunks and branches. They have two toes before and two behind for climbing, and may usually be seen clinging erect on the tree trunks; but rarely, if ever, with head downward, like the Nuthatches and Titmice. As the food of the Woodpecker is nearly as abundant in winter as in summer they are seldom migratory; They never forage in flocks, like some of



the graniverous birds whose food is more plentiful, but scatter out over wide areas, and thus better their fare. They bear the same relation to other birds that take their food from the trees, as Snipes and Woodcocks bear to Thrushes and Quails—that is, they bore into the wood as the Snipe bores into the earth, while the Thrushes and Quails seek the insects that crawl on the surface of the ground. Besides these there are a few birds that take part of their food from trees and the rest from the ground. The thrushes do not refuse an insect or grub that is crawling upon a tree, but they forage chiefly upon the surface of the ground.

The Blackbirds are also guardians of the soil, and apparently are far more industrious than the Thrushes. However, a little observation will correct this delusion. The common Robin hunts his food in a listless, unconcerned way that is very deceptive. He hops about the field with his bill inclined upward, apparently oblivious to any object in view then he makes two or three more hops, and again pauses with his bill turned upward in listless unconcern. But presently there is a quick dart and a vigorous pecking upon the ground, and if you are near enough you will find him pulling out a cutworm or devouring a nest of insects which are gathered in a cluster. On the other hand, Blackbirds seldom hold up their heads, but march along with their bills turned downward, as if entirely devoted to their task. They never seem to be idle, except when a flock of them are making a garrulous noise upon a tree. If a Blackbird looks upwards it is only by a sudden movement; he does not stop. After watching a Blackbird and a Robin ten minutes in the same field, one would suppose that the Blackbird had collected twice as much food as the Robin during that time, But this would not be true. The Robin is probably endowed with a greater reach of sight than the Blackbird, and while hopping about with his head erect, his vision comprehends a wider space. He not only watches for a sight of his prey, but also for marks upon vegetation that denote the place of its concealment.



The omniverous Blackbird hunts the soil for everything that is

nutritious, and picks up small seeds that require a close examination of the ground. Blackbirds of all species walk. They do not hop like the robins. Some species of the foragers do their work in compact assemblages. This habit renders the Snow Buntings extremely attractive. Their food is not distributed in separate morsels like that of the robins and woodpeckers. It consists of seeds and grasses and of composite plants, which are often scattered very evenly over a wide surface. When a flock of fifty or more settle down in a field each one fares as well as if he were alone, during the short time he remains on the spot. Insect feeders find it for the most part profitable to scatter and keep separate, because their food is sparsely distributed. This is not true of birds which frequent the salt marshes that are overflowed by the tide. Their food consists of insects and worms, which are evenly scattered and abundant. Hence sandpipers, and some other species, forage in flocks, though they live exclusively upon an insect diet. The foraging habits of domestic poultry illustrate some of the differences observed in the manner of wild birds. Place a brood of ducks in a field during grasshopper time, and they will generally pursue one course, marching in a body over the field with great regularity; A brood of chickens, on the contrary, will scatter, occasionally reassembling, but never keeping close together, unless they are following a hen. Turkeys scatter themselves less than chickens, but do not equal ducks, in the regularity of their movements. Pigeons settle down upon a field in a compact flock, and then radiate in all directions, They pursue no regular march like the ducks. It is difficult to estimate the usefulness of this systematic army of foragers. It matters not in what stage of its existence the insect is destroyed; it is still demonstrable that these minute creatures cannot be kept in check unless they are attacked in all stages.



Man cannot by artificial means appreciably check their multiplication or their ravages. Birds are their only effectual destroyers. "Protect the birds."



Photo from life by R. H. Beebe.

FLICKER ROW.

A Flicker's nest conveniently located in an apple tree awakened my photographic ambitions one May day last year. As I watched both of the birds going to and coming from the nest it seemed that there was little to do except set up the camera and expose a plate to obtain a good picture. The outer branches of the tree hung very low over the stone wall beside which it stood, and completely concealed the camera as well as the operator. All things considered it was an ideal place from which to obtain a Flicker photograph. One bright sunny day when the young were nearly ready to fly, the camera was carefully set up in position and two plates were exposed when the parent birds were about to enter the nest hole to feed their noisy young. I had confidently expected to see the birds stop at the entrance and look about them as usual before entering, but evidently they suspected something was wrong for no sooner had they touched the tree than they dove out of sight. Although somewhat doubtful of the result under the unexpected circumstances, the two exposures were made, but after developing the plates, the only evidence that the bird had been present when the bulb was pressed was a peculiar and disfiguring disturbance of the atmosphere about the entrance. The next day an attempt to gather on a branch the eight young birds who were just trying to fly resulted even more unsuccessfully. Instead of getting the whole eight sitting in a row we had great difficulty in getting a satisfactory portrait of a single one. They would scratch and bite continually and persist in their attempts to use their wings, so that frequent chases across the field were necessary. So much for my attempts at Flicker photography. The illustrations with this were made by Mr. R. H. Beebe. How he succeeded in keeping seven of them quiet while he took their picture is a mystery to me, unless they were younger and knew less of the ways of the world than mine did.



Photo from life by R. H. Beebe.

SEVEN YOUNG FLICKERS.

BOOK REVIEWS.

Elementary Studies in Insect Life, by Prof. S. J. Hunter (Crane and Co.) While this book is intended primarily as a text book for schools and colleges, it is also a very pleasing and instructive book for the general reader. It is the latest book on the subject of insects and is fully up-to-date. It will prove of great value to agriculturists and horticulturists, separating as it does the beneficial insects from the harmful and relating the best methods for the preservation of the former and the destruction of the latter. The drawings for the illustrations were prepared from the living specimens and fully illustrate the interesting changes that occur in the lives of common insects.

The Birds of Wyoming, by Wilbur C. Knight. (Bulletin No. 55 of the University of Wyoming.) This is a complete list of all the birds known to have occurred in Wyoming, making a total of 288 species and sub-species. It is illustrated with numerous full page half tones from drawings by Mr. Frank Bond. The volume is prefaced with a Note on Studying Birds, in which the author says, "To the citizens of Wyoming, let me ask that they interest their boys in the study of birds." and again, "I would recommend that you commence to make a collection of skins immediately, for in no other way can you accumulate really valuable data." It is extremely unfortunate that this latter recommendation should have been contained in so valuable a work and one which will probably be widely distributed throughout the state. If even a small percentage of the citizens of Wyoming interest their boys in the study of birds along the lines suggested above, not only will no valuable data be accumulated but the state will sustain an irreparable loss. It is the study of the living bird that will broaden the mind and stimulate our youths for greater exertions. With the exception of this one chapter, this volume is one of the best and most attractive state bird publication that has been my fortune to examine.

The Summer Birds of Central Texas, by Mr. A. E. Schutze. A twenty-eight page booklet treating solely of the birds that are known to remain and breed within the prescribed limits.

The Audubon Calendar for 1903, (Taber-Prang Art Co.) The annual calendar of the Audubon societies is composed of six large lithographed sheets illustrating the following birds: Snow Bunting, Fox Sparrow, Baltimore Oriole, Wood Thrush, Meadowlark and Red Cross-bills. The drawings for the lithographs were prepared by Mrs. J. W. Elliott,



Address communications for this department to
 MEG MERRYTHOUGHT, 156 Waterville Street,
 Waterbury, Ct.

MY DEAR YOUNG FOLKS:

You will agree with one of our boys who writes: "It is lucky the birds went south in the fall, because it is ten below zero." Who of you will tell me why the birds take the long perilous journey north and south each year. When they travel, how they know the way, and if they follow the same route each year. Don't you think it is wonderful that these frail gay little sprites cover these long distances twice every year with so few mishaps? To be sure some fall out by the way, some perish against the great lights which have been placed as warnings to mariners, but the large majority of them flit back and forth, season after season to their summer and winter homes. We have but two names to grace the Roll of Honor this month, perhaps those were pretty hard puzzles, and perhaps you will find those given this month as hard, but do not hesitate to send your answers, even though you do not solve every puzzle.

Cordially Your Friend,

MEG MERRYTHOUGHT.

ANSWERS TO JANUARY PUZZLES.

What is his name? Ruby-crowned Kinglet, Winter Enigma, Snow Bunting, Northern Shrike. You will find the quotation given last month in the bible—Prov. 1, 17; Eccl. 10, 20; Job. 39, 13-18.

ROLL OF HONOR:—Stafford Francis, Exeter, N. H. Edna Warren, Cabot, Vt.

FROM OUR MAIL BAG.

You would have laughed to see some Hummingbirds this summer. I lay in the hammock, and back and forth went two over me fretting

away, and by and by I heard a peep, like the squeak of a wheel, very faint. I looked up on a line near me, and there sat a baby hummer. Very soon the mother flew to see what the racket was and flew so quickly, and he was so hungry, and bent to meet her, that he was knocked over backwards and hung head downward. But soon he straightened up and looked surprised, and began to yell, but the parents wouldn't go near him. I began to think they knocked him on purpose, just cuffed him you know. Well after a long time he went hunting for himself. But I just laughed to see the antics, he did look so funny.

MINNIE L. SHAILER,
Haddam, Conn.

DANCING BIRDS.

I wonder how many of our young readers have ever been present at a Woodcock's Ball. It is generally held in April or May, at "early candle light" or at dawn. The chief amusement is dancing, of course, which is done by the male bird. With a loud regular call of "peent, peent," he sweeps upward in great circles, going faster and faster, the rapid motions of his wings giving a whistling sound like the wind rushing through sharp edged reeds, until he is about three hundred feet or more above the ground. Then he plunges downward to the earth again, in zigzag flight with a clear whistle, to his starting point, when he again takes his wheeling upward flight.

Another bird which strives to charm its mate through the dance is the Sandhill Crane. I cannot do better than to give you the following description by Goss: "Their actions and antics are ludicrous in the extreme, bowing and leaping high into the air, hopping, skipping and circling about with drooping wings, and croaking whoop, an almost indescribable dance and din, in which the female (an exception to the rule) joins, all working themselves up into a fever of excitement only equalled by an Indian war dance, and like the same, it only stops when the last one is exhausted." Those of you who live near New York City may have seen these curious antics among the Cranes in the Central Park.

CHARADE

My first are large birds whose homes are in marshy places, and whose food includes frogs, lizards and snakes. My second is owned by every bird and presented by every tradesman to some of his customers and disliked by most people. My whole is a pretty wild flower with a lavender blossom.

CHARADE.

My first improves cream, and according to Solomon, children likewise. My second may be good for us all, but no one desires it. My third contains the last wishes of a dying man. My whole is a bird with a mournful evening cry.

What is the bird thus described by Wilson? Have reduced the science of flying to a fine art, they stand and even run upon the surface of the water. When any greasy matter is thrown overboard, these birds instantly collect around it, facing to windward with their long wings expanded, and their webbed feet patting the water. The lightness of their bodies and the action of the wind on their wings enable them to do this with ease. In calm weather they keep their wings just so much in action as to prevent their feet from sinking below the surface.

NUMERICAL ENIGMA.

I am composed of 11 letters. My 11, 5, 8, 11, is something the lark does that you cannot. My 9, 2, 3, 4, 11, is something you do that the lark cannot. My 6, 8, 7, 10, 11, is something the Ovenbird does that the Robin does not. My 6, 3, 4, 2, 11 is something that the Heron does that the Ovenbird does not. My 6, 5, 9, 10, 11, is something a lazy boy does not do if he can help it. The farmer 1, 5, 6, 11, and 9, 3, 10, 2, 11, in the 1, 2, 3, 4, 5, 6, 11. My whole is a common bird.

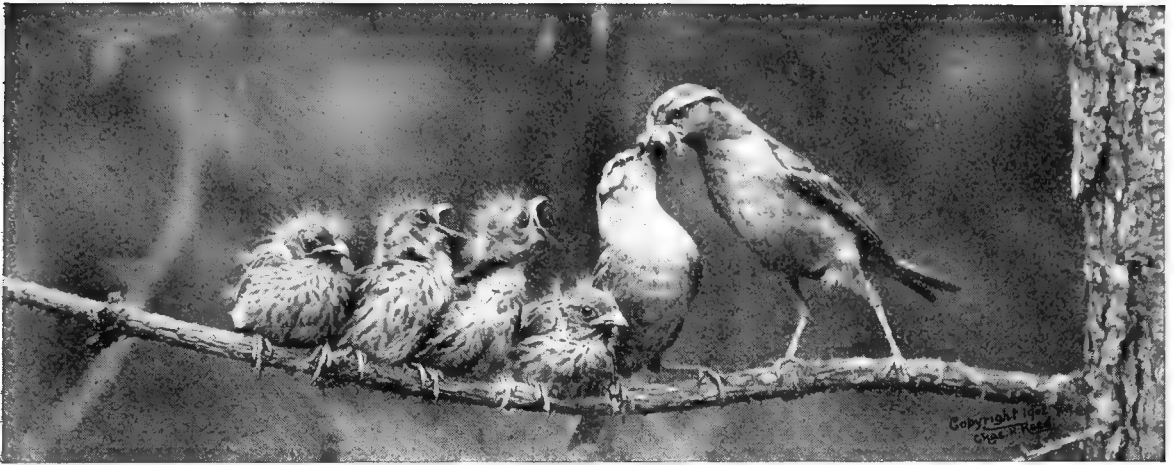
GLEANINGS.

Come busy Nuthatch with your awl,
 But never mind your notes,
 Unless you've dropped your nasal chords
 And tuned your husky throats.

ELLA GILBERT IVES.

LEACH'S PETREL.

When handled these birds emit from mouth and nostrils a small quantity of oil-like fluid of a reddish color and pungent, musk like odor. The air at nesting site is strongly impregnated with this odor, and it guides the searcher to the nest. (Chamberlain.)



PREPARING BREAKFAST.

This seems to be the most appropriate name for the companion picture to the "Chippy Family." This photograph was taken from the same group of Chipping Sparrows only a few minutes later. We have had this made to correspond in size to the "Chippy Family" and printed in color on the same size paper, 12x20 inches.

In a number of respects, this new engraving is a more interesting one than is the "Chippy Family." The self satisfied appearance of the two end young birds and especially the appealing attitudes of the two middle little fellows will "take" with everyone. The female bird, at the extreme right has just brought an unusually large green worm. The male had just fed the right hand young one and was preparing to leave when she came; she made him take one end of the worm and then while he pulled down, she lifted upward with all her strength until the worm separated. The pieces were then fed to the eager little ones.

These two companion pieces will make a unique addition to the walls of any house. They are more valuable than the creation of any artists imagination; they tell the true story of the every day occurrences in the life of one of our best known and most useful birds.

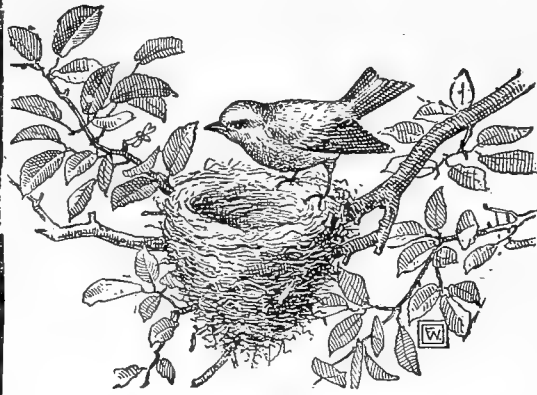
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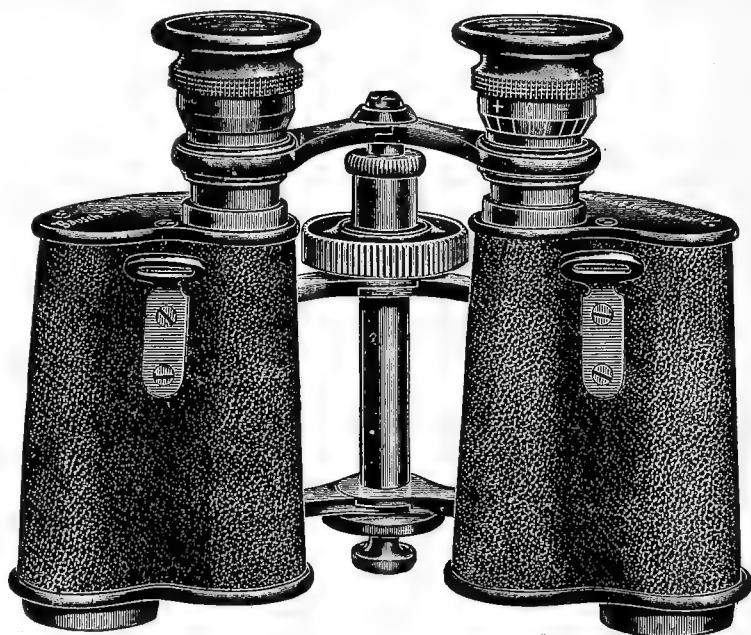
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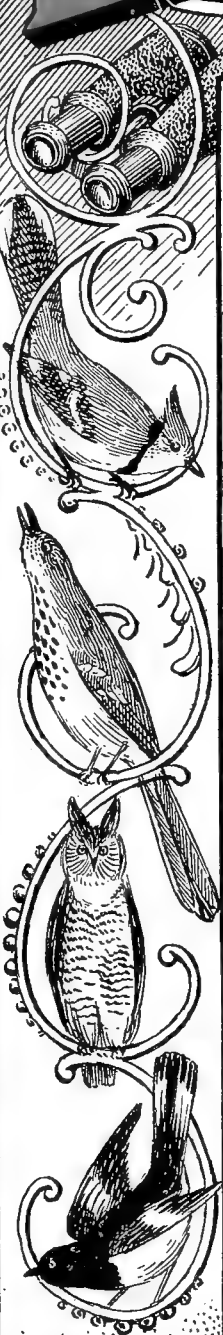
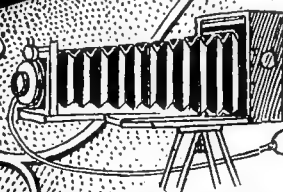
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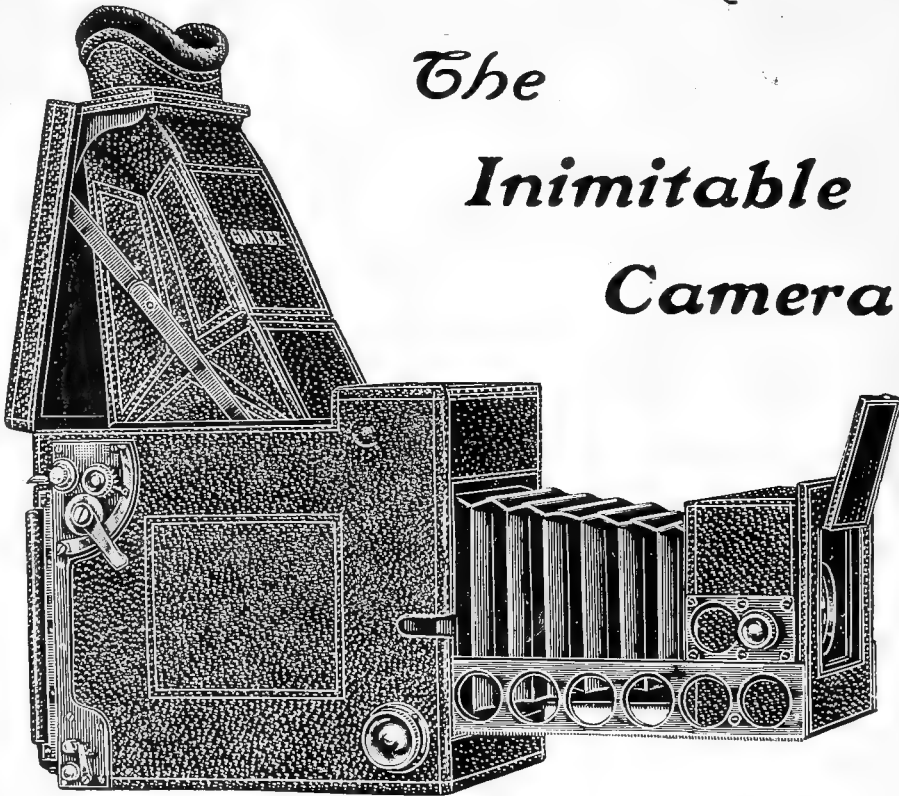
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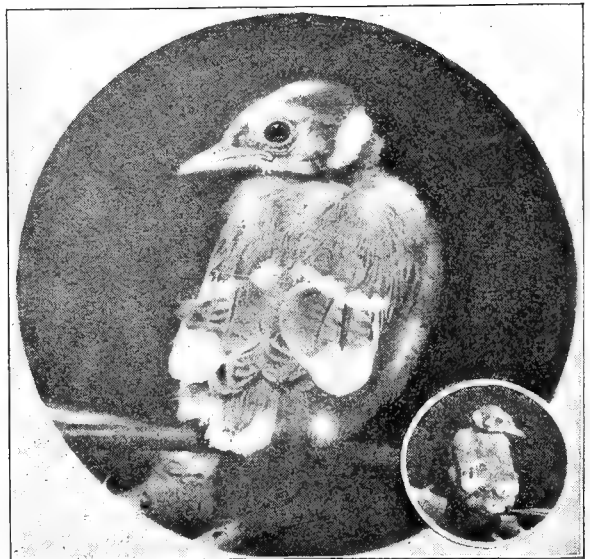
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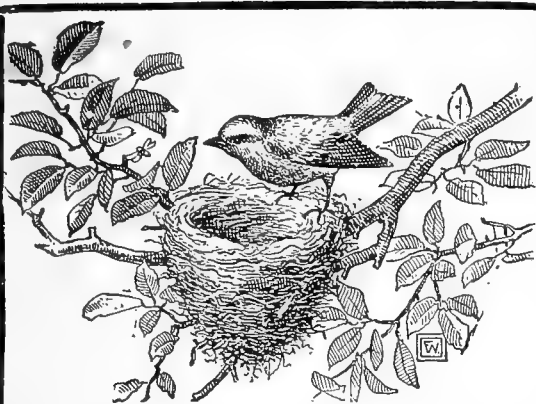
The original drawings for the work were made from nature by Theodore Jasper, A. M., M. D., an artist of superior capabilities; who has made ornithology a life-study. Revised by John Graham Bell, Esq., Audubon's companion in the field, and a well-known ornithologist and taxidermist. The systematic table, arranged according to the classification adopted by the American Ornithologists' Union, was prepared by Frank M. Chapman, Esq., Assistant Ornithologist at The American Museum of Natural History, New York, includes all the additions to and corrections of our North American species which have been made to date, with an index to page, plate, and figure, of each species, according to the A. O. U. number.

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VOL. III

MARCH, 1903.

NO. 3.

We feel that it would be useless to apologize for the unwarranted blunder of our printer in using yellow on Red-breasted Nuthatch plate, instead of reddish-brown. This sheet will be reprinted and sent to all our subscribers with the April number, so that it may be inserted in the proper position. Owing to the lateness of the date we allowed this number to go out rather than have the magazine reprinted and two weeks late.

We have had a great many requests for lantern slides from our negatives. This month we have a series of them listed in the advertising page. We shall positively list nothing but boni fide photos of live birds.

Last month we published "Winter Birds" without the author's name, as he failed to put it on the Mss. It was by Mr. Berton Mercer, whose name is familiar to our readers as the author of several articles in former issues.

We call our readers attention to the change in the address of the Folmer & Schwing Mfg. Co., whose ad. is in this number. Besides making the Graflex, which, though expensive, is indisputably the best all-around camera on the market, they make a full line of ordinary cameras which are perfectly adapted to nature photography.



Photo from life by E. L. Bickford.

CALIFORNIA BUSH-TIT.

AMERICAN WOODCOCK.

A. O. U. No. 228.

(Philohela minor.)

RANGE.

Eastern North America, south from the British Provinces and west to Dakota and Kansas. In winter they migrate south of the Middle States.

DESCRIPTION.

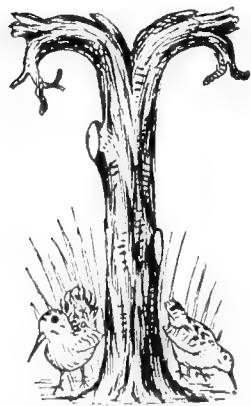
Length, 10.5 in.; extent. about 16 in.; tail, a trifle over 2 in. Eye, dark brown. Bill and feet light brownish. Entire upper parts beautifully patterned with black, buffy, and rusty. Entire under parts more or less bright rusty brown.



NEST AND EGGS.

The Woodcock makes no attempt to build a nest of any sort, but lays her four brown-spotted, buffy eggs directly upon the bed of leaves which nature has prepared for her. Damp, boggy places are their choice for a locality, and it has been my experience that swamps covered with alder bushes are most frequently chosen. They breed from the latter part of April to the end of May, and if the first set of eggs is destroyed they will lay again in the same neighborhood.

HABITS.



HE American Woodcock is a most peculiar and interesting member of the large and varied family of shore birds. The most striking features are the extremely large, dark-brown eyes, situated alarmingly near the highest point on the top of his head. It might almost seem that they were thus located to partially atone for the shortness of his neck, so as to enable him to see over the grass, in which he likes to hide; but it is much more probable that they have gradually changed from the normal position through excessive use in one di-

rection. As is well known, they gather their food, which consists of various grubs, by boring in the soft mud with their long bills, and as their food is gathered wholly by feeling and not by sight, it is probable

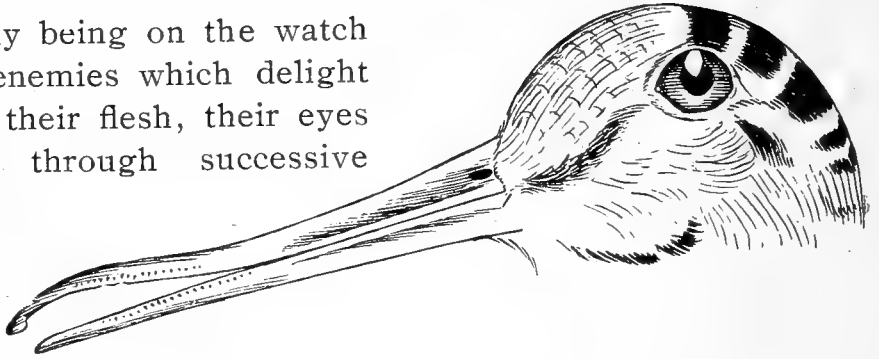


FIG 1

Photo from life by C. A. Reed.

WOODCOCK AT REST.

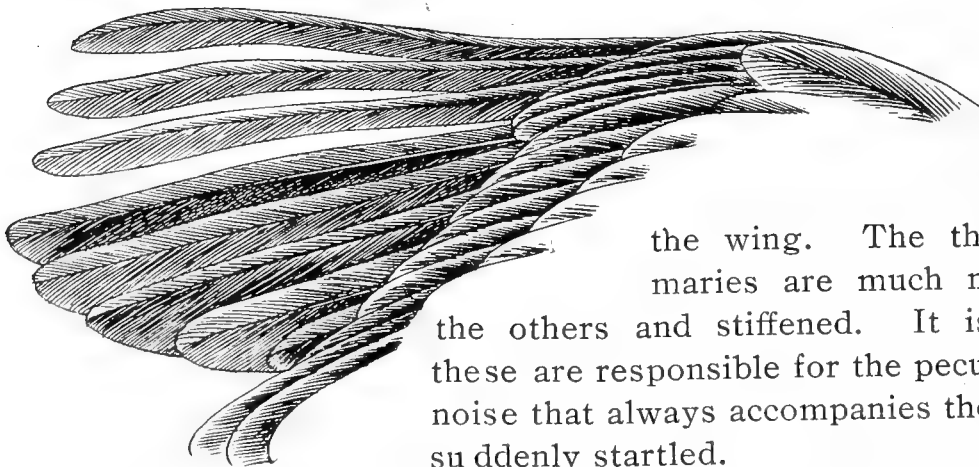
that by constantly being on the watch for the various enemies which delight in a feast upon their flesh, their eyes have gradually, through successive generations, been brought to the present position on the top



of the head, as that is the direction from which danger would be most apt to come.

BILL OF WOODCOCK, SHOWING EXTENT TO WHICH UPPER MANDIBLE CAN BE MOVED.

About the latter part of March, as soon as the frost has commenced to get out of the ground so that it can be penetrated with their bills, they return to the North and their nesting places. It has been found that the bill of a Woodcock, besides serving as a probe, is also used as a finger to grasp the delicacy when it has been found. The tip of the bill is very sensitive, so that the owner can tell when he has found the morsel for which he is looking. He can then curve the upper mandible upwards, grasp the insect and draw it from the ground. The advantage of this power, to move the end of the bill at will, can be seen when it is considered that it would be impossible to open the entire bill when inserted in the earth, and would therefore be impossible for them to get their food after having found it.



Another peculiarity in the Woodcock's construction is

the wing. The three outer primaries are much narrower than the others and stiffened. It is claimed that these are responsible for the peculiar whistling noise that always accompanies their flight when suddenly startled.

The few mouthfuls of flesh that can be gleaned from their little bodies are highly esteemed by sportsmen, and they are one of the most persistently hunted of the game birds. They lie very close, trusting to their dried leaf colored plumage to conceal them; but when startled, fly very swiftly and in a zigzag course that makes their escape quite certain when a novice is behind the gun. With an experienced hunter, their chances of getting away are very slim, especially if, as is nearly

always the case, he is accompanied by a dog. Even if the first shot is a miss, he knows that the bird will fly but a short distance before seeking cover again, and he knows that the acute sense of smell possessed by his four footed companion can soon locate it again.

As a general thing Woodcock may be considered as partially nocturnal in their habits. They prefer to remain in quiet concealment during the day, and venture out at dusk in their search for food. The bright sunlight seems to be too light for their eyes and they are a great deal more active during cloudy weather. Their migrations are performed almost wholly by night and when on these journeys they generally fly at quite an elevation. When passing over cities, they appear to be attracted by the lights and fly lower; as a result, it has been my experience that more of these birds are killed or maimed by flying into wires



EGGS OF AMERICAN WOODCOCK.

than of any other bird. They are not very sociable, and two or three individuals are generally all that are found in one place. After the nesting season is over they remain in the same locality until cold weather renders the obtaining of food a difficult and uncertain propo-

sition, when they take their departure for the winter. Details concerning their nesting habits will be found in the following account of

A SUCCESSFUL WOODCOCK HUNT IN MAY.

For several seasons past, a Woodcock's nest has been one of the goals for which I have been striving. In years past, numbers of nests had been found, but that was before the camera had begun to be applied to nature study. Now that one was wanted, it seemed to be an impossibility, and I had given up the search until another year, when I came across one accidentally and most unexpectedly. On May 23rd I was looking over a very small piece of woods where I had every reason to suspect that a pair of humming birds were building their home. I was seated within a large clump of ferns, when a slight movement of the leaves at one side attracted my attention. It was with a feeling of both surprise and exultation that I saw a Woodcock carefully picking his, or her way across an open space between the numerous ferns; I watched the bird as closely as possible as it passed by all the open spaces until at last it failed to appear after going behind an unusually large clump of ferns. After watching for fifteen or twenty minutes without further developments, I carefully went to the place where she was last visible and scanned the ground the other side of the obstruction; although she was scarcely visible owing to the surrounding, I finally located her sitting on her nest, or apparently on the bare leaves, and within a square formed by pieces of fallen birch. As I stood up within six feet of her, she neither moved her head nor winked, but seemed loath to believe that I saw her even though I was looking directly at her.

As it was getting near the end of the nesting time for Woodcock, it was deemed advisable to secure what views of her I could at this time as there is no knowing what the morrow will bring forth. This nest was located in a typical place for these birds. A small brook flowed through the patch containing perhaps a dozen large trees, and the ground was well concealed with numerous small bushes and enormous clusters of ferns. On both sides of the brook, the soil was soft and boggy, affording an ideal place for foraging ground for Woodcocks. I had never thought of looking for them here and consequently had never looked for the borings which I later found in clusters all along the brook. The nest was located under an alder bush and was just five feet from a massive growth of ferns which later served me for a good purpose. Owing to the larger trees the sunlight was entirely excluded, so that nothing but a time exposure would suffice to get a picture.

Not a movement from Mrs. Woodcock as I set up my camera and carefully focussed upon her; but just then a sudden and unexpected

gust of wind blew the focussing cloth over the end of the camera. This was something for which she was not prepared and with a rush of wings she was up and over the tops of the bushes, doubling and turning in her hurry to get away, while the shower of leaves that had risen with her fell back over the ground, and left four eggs exposed to view. These like the bird matched the color of the surroundings so well that they would stand little chance of detection among the leaves. I wished to see the bird when she returned to the nest, so instead of going away and allowing her to return when she chose, I moved the camera into the clump of ferns mentioned previously, focussed carefully on the nest and then concealed myself in the same clump beside the camera.

The long wait that followed was fully taken up in watching the numerous other birds that thronged the place. In just about an hour from the time she left the nest I caught sight of her slowly and cautiously coming up the bed of the brook. Every few steps, she would pause and listen as though not quite certain that I had gone. When she reached the point in the brook directly opposite and about fifteen feet from me she paused for fully five minutes. She looked very intently in all directions and especially towards the nest, and I fancied she was looking at me although I was positive that she could not see me; yet I was relieved when she started up the slight incline from the brook, towards me. She walked with her body in a horizontal position, neck well shortened, and with the bill pointed straight ahead. Her gait was a little awkward; almost a waddle like a duck. I could not but wonder as she approached step by step, her apparently black eyes looking fearfully about her, if, were some of the sportsmen that I know in my place, watching this innocent bird returning, faithful to the charge which she had deserted only at the last extremity and not yet certain but what she was walking into a trap, would they in the fall tramp the country all day long in search of Woodcock, returning at night happy in proportion to the number of birds that they had slain. I am positive that they would not if they could have witnessed the scenes that transpired at the nest for the next five hours, as I did.

Once again she stopped and waited a long while when just beside me and not more than four feet away. She acted as though she thought that all was not just right but did not discover me, although I feared that she would every moment. A minute later and she was beside the nest. She seemed to lean over and caress the eggs for a moment, then arranged some of the leaves to better suit her fancy and settled down upon the nest. She turned about a couple times to get a comfortable position, and I was afraid she would settle down in a position unfavorable to my purpose. At last she assumed her final position nearly side



Photo from life by Dr. J. B. Pardoe.

YOUNG WOODCOCK.

to, which had been anticipated, as her position when first found was such.

The situation was entirely novel to me; I had been as near to live Woodcock before but this was the first time that I had ever watched one from a short distance while she was unaware of my presence. She was actually only five feet away, and by the use of binoculars she was shown as though only a foot from my eyes. Her plumage could be examined as minutely as though in the hand, while her soft, dark brown eyes, as she turned her head from side to side, looked as though they could speak.

For some time after settling down to her duties her head was continually in motion. she carefully arranged all the feathers on her back with her long bill and now and then reach out to change the position of some leaf to suit her artistic fancy. Fig. 1 shows the position that she finally assumed, and it is the natural pose of a sitting Woodcock when not alarmed. Several excellent photographs of Woodcock have been taken but all that I have ever seen show the bird in the position they assume when alarmed, that is with the head forward, in a straight line with the body, and the bill nearly lying on the ground. The plumage is also contracted and she does not have the easy pose that this one has. For fifty-five minutes she kept this same position without any change whatever; at this time a very loud whistle accompanied by a small boy, came through the woods. He did not pass by near enough to discover either myself or the nest. When the first strains of "Annie Laurie," which he was vigorously if not musically rendering, reached us, the Woodcock turned her head in the direction of the sound, and as the boy came into sight, she drew her feathers down closer and let her head fall forward so as to better match the leaves and twigs. This was when photograph No. 2 was made. If the boy had come closer she would probably changed her position more yet.

Another wait of an hour occurred before any change took place. This interval I spent in watching various warblers and a pair of thrushes. One male Maryland yellow-throat proved especially interesting, so much so that he nearly betrayed my hiding place to the Woodcock. I presume that he was searching for food when he hopped up into my hiding place and caught sight of me. His loud rattle of alarm which he uttered as he made haste to get away was amusing, but not so much so as when he appeared again on the nearest twig above me and scolded, accenting each remark with a flirt of his tail. It was just three o'clock and I had about made up my mind to leave, having concluded that she was not going to leave the nest to feed until after dusk, when I heard a low, peculiar twittering whistle. I was unable to locate it for several



FIG .2.

Photo from life by C. A. Reed.

minutes although it sounded nearer every time it was repeated. It was an unexpected treat when the author of the sound suddenly appeared beside the nest as Mr. Woodcock. I had not supposed that the male Woodcock would appear about the nest until after dusk, but he disproved that supposition.

The picture that he made as he proudly strutted about her was one that I would give a great deal to be able to have shown with the camera. It was one of the opportunities that will probably never present itself again and I was unable to take advantage of it. Possibly if I had had a Graflex camera I might have caught them, but the light was poor and it is doubtful if I could have focussed upon them without attracting their attention. His head was thrown well back upon his shoulders and the tail, which was fully spread in the form of a fan, was thrown forward so that it touched the back of the head. No peacock that ever strutted was prouder than this male Woodcock. He seemed utterly oblivious to everything but his own self, and tripped over nearly every twig that was in the way. Perhaps he was an inspiring sight in the eyes of the female, but he seemed to me to be a very ludicrous one.

He strutted back and forth in front of the nest and only about four feet from me several times, and then took wing and disappeared in the direction from which he had evidently come. I noted that as he started off there was no perceptible sound from his wings, so conclude that it is only when startled and moving their wings very fast in their endeavor to quickly get away, that the narrow stiffened primaries, make the whistling sound that is accredited to them.

As the female settled back again to her quiet task of incubating, I determined to leave. She had probably never been as surprised before, as she was when I stood up so close to her. She must have thought that I came up out of the ground, in any event she did not wait to see or try to escape observation by keeping still, for she was off with a tremendous whir that threatened to carry all the leaves that answered for the nest, with her. The next day I called again and found the nest



Photo by J. B. Pardoe.

YOUNG WOODCOCK.

empty. From appearances the young had hatched and had already left to accompany their parent and learn the ways of the world.

Fortunately Dr. J. B. Pardoe has supplied the missing links necessary for the completion of this article in his excellent photos of the young Woodcock. A thorough search of the piece of woods failed to reveal the young that I had expected or rather hoped to photograph when they hatched. I had hoped for photos of some such scenes as I had witnessed a few years ago when I ran across an adult Woodcock with three of her young. I came upon them with a suddenness that

surprised them as much as it did me and they had no time to conceal themselves. The mother with all the known bird arts of deceit tried to lead me away from the bunch of little ones who had all huddled down where they were. When instead of doing this I stooped and picked up one of the young, she bristled up her feathers until she was about twice the normal size, and with utter disregard for her own safety, came at me striking my hands with her wings.

It has been claimed that a Woodcock in times of peril for her little ones will take them one by one in her feet and fly to a place of safety. Of course this may be true, but I shall doubt it until more positive proof is offered, for no bird ever had a better opportunity to accomplish this feat than was allowed this one; but she showed no inclination to carry them off other than to lead them.

DOWNY WOODPECKER.

A. O. U. No. 393.

(*Dryobates pubescens.*)

RANGE.

Northern and eastern North America. West to the edge of the Plains and British Columbia. South to the Gulf of Mexico.

DESCRIPTION.

Length, about 6.5 in.; extent, 12 in.; tail, 2.75 in. Back, black with a long white stripe down the middle, wings black, with numerous white spots as in the illustration. Top of head, line from the eye back, and from below the eye down the side of neck, black. Breast, chin, throat, line under the eye and down side of neck, and one over the eye to back of head, white; this latter runs into a bright vermilion spot on the back of head. Rump and middle tail feathers black; the outer ones white with black spots on the outer webs. The female differs only in lacking the red spot on the back of the head. There are two subspecies as follows:

394a. Gairdner Woodpecker. (*D. p. gairdnerii.*) Pacific coast, north to British Columbia. Similar to the Downy but lacks or has very few white spots on the inner secondaries and the coverts, these being plain black.

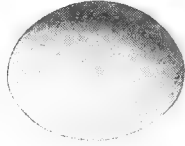
394b. Batchelder Woodpecker (*D. p. oreoecus.*) Rocky Mt. region of the U. S.

NEST AND EGGS.

Downy Woodpeckers build their nests in holes in trees, either in the dead branch of an apple tree or the trunks of dead trees in the woods. They are generally less than twenty feet from the ground and from



that height range down to five feet, or sometimes even lower when they choose to take up their domicile in a fence post. They lay from four to six, most often four or five, pure white glossy eggs. These vary greatly in size and range from .73 to .86 in. in length by .56 to .64 in. in



width. Usually the eggs are laid upon the fine chips at the bottom of the excavation, or there may be a slight bed of either feathers or fine grasses. They nest all through May and the early part of June.

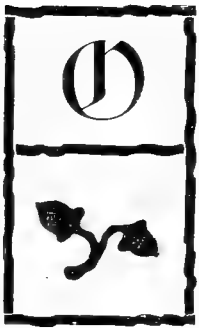
HABITS

The Downy is one of the smallest, most social, and probably the best known of all the American Woodpeckers. They are erroneously called Sapsuckers by some. They have never been known to indulge in this practice, which owing to the abundance of these Woodpeckers would destroy large numbers of trees. On the contrary they are of the greatest assistance to the horticulturist, as their food consists of beetles, caterpillars, spiders, ants, and the larvae or eggs of nearly all insects. At such times as their regular fare is lacking they will feed on seeds, berries, or nuts. One way to obtain their friendship in winter is to suspend pieces of meat or suet from trees where they are abundant; they will come day after day to this welcome food, which they will share in perfect harmony with nuthatches, chickadees, etc. You have probably noticed rows of tiny holes extending nearly around some apple trees. These are the work of the Downy in his search for the insects which, if left to do their work unhampered, would soon increase in numbers so as to devastate every orchard. He will stand on the upright trunk of the tree, firmly braced with his pointed and stiffened tail feathers, and chisel through the bark in a regular series of holes as he works his way sideways around the trunk; he will then drop down about his own length and hammer another circle around the tree. As far as injuring the trees by his work upon them, those that have the most numerous Woodpecker tappings are generally the ones that are in the most flourishing condition, not directly because of his labor, but because of the diminished number of insects who would attack it vitally.

Downys are not very sociable among their own kind, as seldom are more than two or three seen near together, but they do like the company, especially in winter, of nuthatches, kinglets, chickadees, and any others of the small winter birds. They also like the vicinity of human habitations better than the larger woods and are seldom found in the

latter except on the outskirts or the edge of clearings. Their song is a cheery one, especially when heard in the solitude of winter. It is a metallic whistle running something like "pinc - - - pinc - - pinc-pinc - - - -," the number of notes ranging from six to ten and being uttered more rapidly and lower towards the last. This is their song; they also have a single sharp short whistle for a call note. Sometimes, especially in the spring; they will take their station on some dry, dead branch and drum continuously for fifteen or twenty minutes at a time, only stopping for a few seconds now and then to see if there is any answer to their challenge, if such it is. They are very active and run up, around, or even down a tree trunk with great agility. They are rugged little fellows and stand our severe winters, while the larger flickers go to warmer climes. They are equally at home from northern North America to Florida and are quite common throughout their range.

THE SPOTTED SANDPIPER.



ONE beautiful day in May, while strolling along the banks of a stream, which meandered through a meadow inclosed by rolling hills, my attention was attracted by a bird running along a sand-bar in the middle of the stream.

Having lots of time to spare I sat down and proceeded to become better acquainted with my little friend. By the length of its neck and legs I concluded it belonged to the family of Waders, which was subsequently proven by its entering a shallow part of the stream in search for food.

It came closer to where I lay and thus afforded me the opportunity of better observation. It was constantly in motion and never ceased a peculiar movement of its body, tilting it up and down in a see-saw fashion. It uttered a plaintiff "peet weet" as it flew from one place to another but seemed to do so only while on the wing. When flying two white wing bars were very noticeable, which with its other peculiarities, proclaimed it to be the Spotted Sandpiper. Locally it is also known by the names of "Teeter tail," "Sand-lark," "Peet-weet," "Tip-up," "Bobber," etc.

This charming little bird reaches us early in May, having passed the winter months in South America and the West Indies, although some few remain as far north as the Gulf States. It is very common throughout the United States and breeds wherever found.

Several pairs have reared their young year after year on a little island, formed by the branching of a small river, just outside of Baltimore. Although a small village has encroached upon their nesting sight, still they return each spring as before. Another disadvantage

they endure is a herd of cows, which frequently roam over the island and must be a constant menace to their peace and happiness. Still they stick by the old home they have adopted, and at the end of each season the increase in their number proclaims that they do well and thrive in spite of surrounding dangers.

One day in the middle of June, while roaming over the islet, which is covered in parts by grass and low weeds, I unexpectedly ran across several young Sandpipers. They were quite young but their infancy did not hinder them from instantly dodging out of sight among the weeds. One little fellow, being of a more adventurous nature, ran for the water and boldly launched itself into the stream. Soon, it reached the opposite bank and was quickly out of sight.

All the while the parent birds were very anxious about their offspring and uttered their peet-weets in a very excited manner, but at the same time keeping under cover and only showing themselves when I approached too near.

The young of the Sandpiper are able to run about as soon as hatched



Photo by D. W. Munter

NEST AND EGGS OF SPOTTED SANDPIPER.

from the egg and follow the mother bird about the same as the little chicks do in the barn-yard.

The nest of this bird is placed in a depression on the ground, and generally consists of a lining of grasses and moss, but sometimes the eggs are laid on the bare ground. The nest is cleverly hidden under the shelter of high grasses or clumps of weeds and is very difficult to discover.

W. H. MUNTER.

DOWN BY THE STREAM.

BY OLIVER DAVIE.

Down by the stream where the lillies grow,
Where the herons drink, and come and go;
Where the cardinal loves to sing,
And the vultures spread their sable wing,
Down by the stream.

Where the rain-crow hides his slender form
And tells us of the coming storm,
Where vireos tumble through the trees;
Where the chickadees *weeze* and *weeze*,
Down by the stream.

Meadows spreading far and wide,
Down by the stream at eventide;
The sun's soft splendor casts its rays—
(Light of the past and coming days)
Down by the stream.

Where the cattle love to drink and wade
In the summer's golden shade;
Swallows twit as they pass by;
Blackbirds glint their silver eye,
Down by the stream.

Where the sycamores' stately arms
Shade the lillie's waxen charms
Sandpipers peep at break o'day
Chipmunks rant in merry play,
Down by the stream.

Where turtle doves before a storm,
'Midst summer's smiles or winter's scorn;
Their voice is always heard to mourn
"Life is sad and all forlorn,"
Down by the stream.

A SPARROW HAWK'S MISTAKE.

Mr. Sparrow Hawk Jr. was able to fly. Doubtless he had promised himself while in the nest depending upon his parents for a livelihood, that when he did get out he would gorge himself to his crop's content. Whether this was his first expedition in search of food or not of course I cannot say, but judging from his unsteady flight I should say that it was. I did not see the chase begin. The first that I knew of it my attention was attracted by the screams of the hawk and looking in that direction I saw a small ground sparrow fly swiftly from a clump of trees, in which a pair of Sparrow Hawks had nested. A group of barn swallows were enjoying a game of tag, and as the hawk and sparrow passed one of the swallows flew between the pursued and pursuer, either to share the fun or by accident; any way, the hawk left the sparrow and concentrated all his energies upon the swallow who enjoyed it much—keeping just out of reach of the angry hawk. At length the patience of the hawk was completely exhausted, and he gave vent to his feelings by a series of squawks and "gi-lees" which unfortunately for the hawk, attracted the attention of a passing kingbird, who hastened to the scene of conflict with a will, cruelly tearing the feathers from the young hawk.

A brown thrasher from a dead pine looked on with as much cold-blooded interest as an old Roman at some combat, and with tail down cried: "Pull 'um out, pull 'um out, killhim-killhim, that's it-that's it."

A. L. MCINTIRE.



Photo by Geo. W. Fisk.

YOUNG HORNED GREBE.

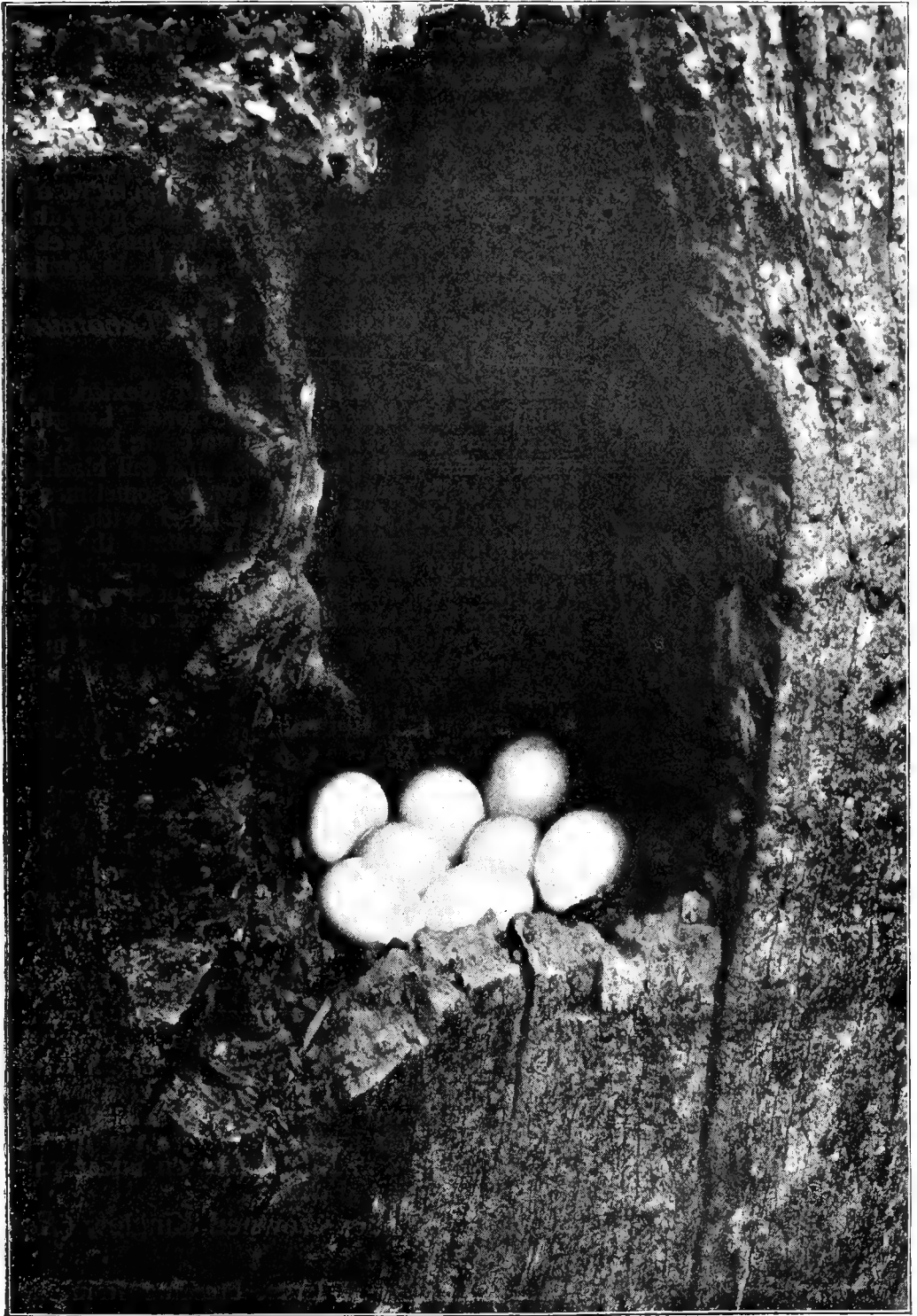
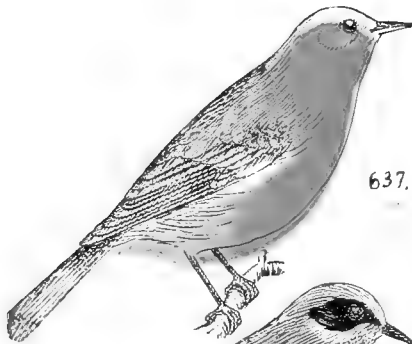


Photo by Geo. E. Moulthrop.

NEST AND EGGS OF FLICKER.

Identification Chart No. 14.

Orange Warblers.



637.

No. 637. Prothonotary Warbler (*Protonotaria citrea.*)

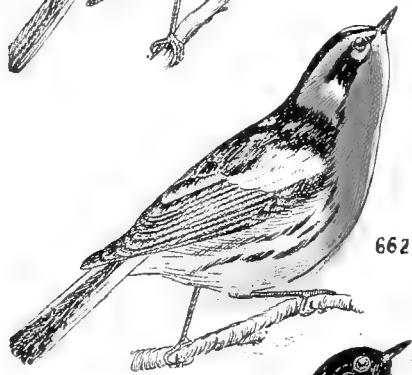
Southeastern United States; west to the Mississippi; north to the Middle States and casually further. Length 5.5 inches. Head, bright golden yellow, becoming paler on the belly and changing to olive on the back. Rump, wings and tail blue gray, the latter having a large spot of white on the inner web of all the outer feathers. The female is similar but somewhat paler.



651.

No. 651. Olive Warbler, (*Dendroica olivacea.*)

Highlands of Guatemala and Mexico, north to southern New Mexico and Arizona. Length 5 in. Head and neck an orange brown color; back, grayish; under parts whitish. Wings and tail blackish, the former with two broad bands sometimes nearly merging into one and the latter with the outer feather white. A black patch around the eye, and the edges of the secondaries are greenish yellow. Female: Top of head and hind neck greenish; ear patch, dusky; sides of neck, throat and chest yellowish; rest of plumage similar to the male but wing bands narrower, and spot at base of primaries smaller.



662.

No. 662. Blackburnian Warbler, (*Dendroica blackburniae.*)

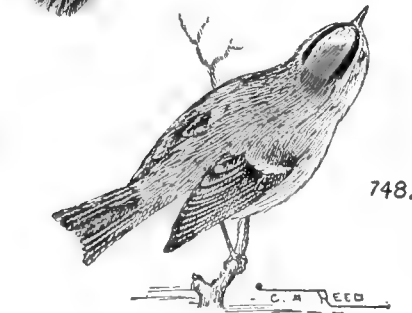
Eastern U. S. and southern Canada; west to the Great Plains. Length 4.75 in. Crown patch, throat, superciliary line and side of neck, bright orange. Large white patch on wing. Female.—Above grayish olive streaked with black. Bright orange parts of the male are a pale yellow. Other markings similar but dull.



687.

No. 687 Am. Redstart, (*Setophaga ruticilla.*)

Found throughout temperate North America except the Pacific Coast within the U. S. Length 5 in. Glossy black; white belly; base of all outer tail feathers, band on wing and large spot on side of breast, orange red. Female:—Marked precisely the same with the black replaced by grayish brown, the orange by yellow and the white on under parts includes the throat and chin.



748.

No. 748. Golden-crowned Kinglet, (*Regulus satrapa.*)

North America at large, breeding from northern U. S. northwards. Length 4 in. Superciliary line and forehead, white; crown black enclosing a flame colored patch within a yellow one. Female similar except that the whole crown patch is yellow.

Yellow Warblers.

No. 640. Bachman Warbler, (*Helminthophila bachmani*).

Southeastern U. S. north to southern Virginia. Length 4.5 in. Forehead, shoulder, and entire under parts yellow. Upper parts greenish; crown and patch on throat black. Outer tail feathers with a white spot on the inner webs near the tip. Female: Much duller and without the black cap and patch on the breast; the top of the head being olive gray, as is the back.



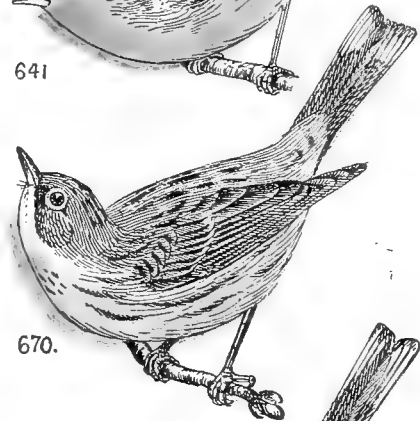
No. 641. Blue-winged Warbler, (*Helminthophila pinus*.)

Eastern U. S. from southern Conn. southwards; west to eastern Nebraska. Length 4.75 in. Forehead, crown and under parts, bright yellow, paler on the belly. Upper parts olive green. Wings and tail gray, the former with two white bands and the latter with subterminal spots of white on the inner webs of the outer feathers. Female:—Duller in color than the male with the olive greenish of the upper parts, also covering the crown.



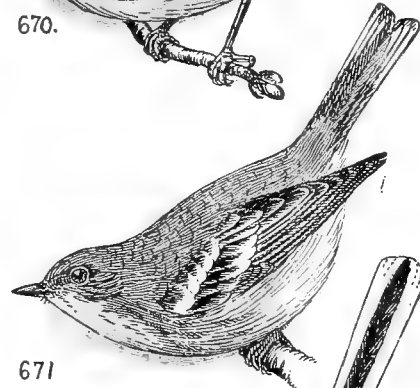
No. 670. Kirkland Warbler, (*Dendroica kirtlandi*)

Eastern U. S. and southern Canada. The breeding range is unknown and it is very irregularly distributed. Entire upper parts bluish gray streaked with black. Under parts yellow streaked with dusky. Inner web of two outer tail feather with terminal white spots. Female duller colored.



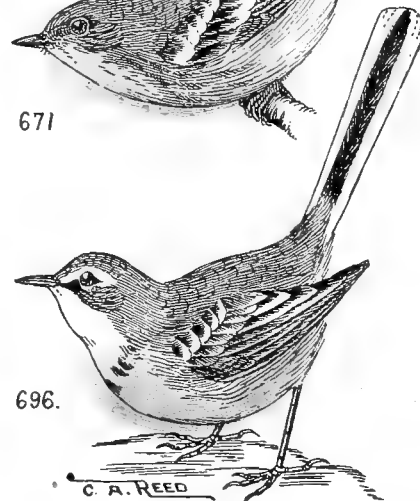
No. 671. Pine Warbler, (*Dendroica vigorsii*.)

The United States east of the Plains; north to the southern British Provinces. Length 5 in. Above, olive green. Below, pale yellowish streaked with dusky; wings and tail, grayish, the former with two white bands and the latter with the subterminal half of the inner webs of the outer tail feathers, white. In autumn the yellow on the male is much purer than in the spring and summer. Female:—Duller than the male; the under parts only tinged with yellow on the breast.



No. 696. Siberian Yellow Wagtail (*Budytes flavus leucostriatus*.)

Found in North America in Alaska. Length about 6.5 in. Grayish above. Superciliary line, chin and throat white; rest of under parts yellowish. Tail feathers white except the black central pair. Two narrow white bars on the wing and the secondaries broadly edged with white. Female similar.



RED-WINGED BLACKBIRD.

A. O. U. No. 498.

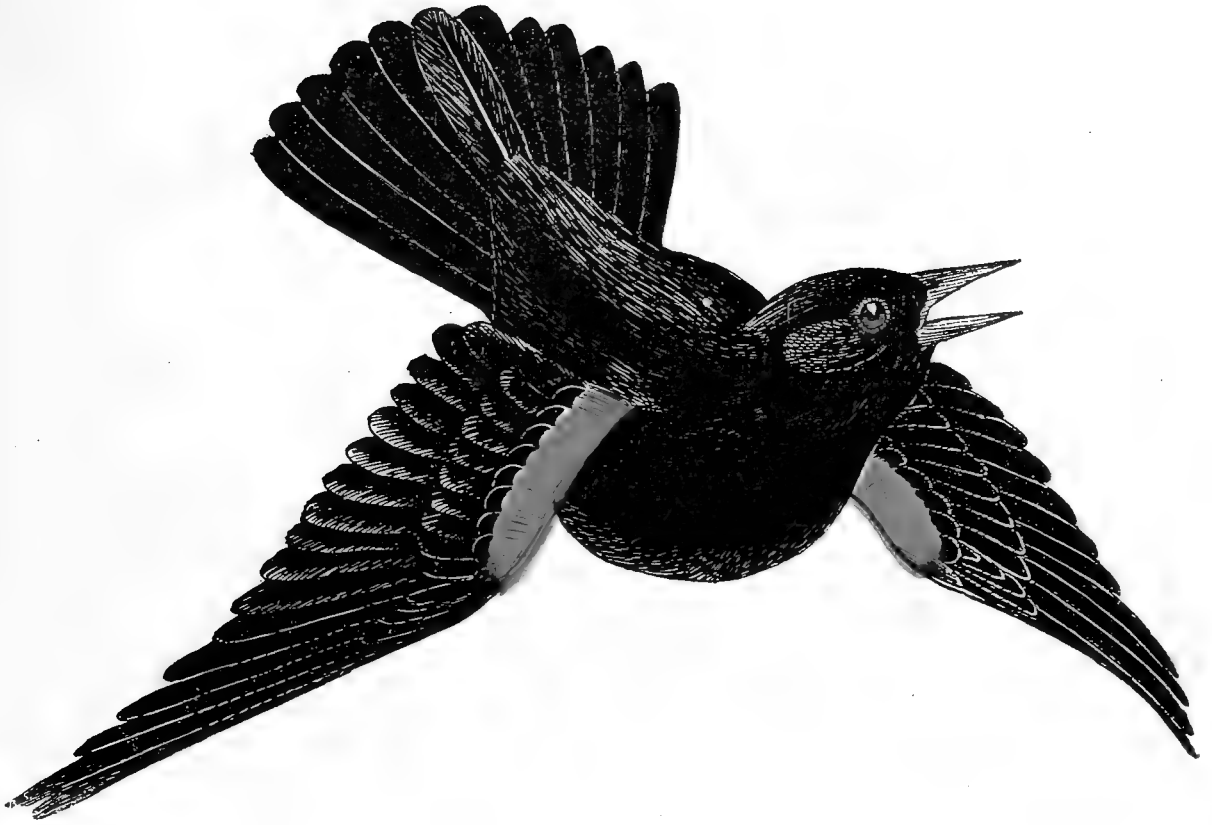
(Agelaius phoeniceus.)

RANGE.

The Red-winged Blackbird and its subspecies are found throughout the United States and Canada from the Great Slave Lake southwards. The American Ornithologists' Union separates the Redwing into the following sub-families: 498a. Sonoran Red-wing (*A. p. sonoriensis*,) whose range is the southwestern portion of the United States; 498b. Bahaman Red-wing (*A. p. bryanti*,) whose range is the Bahamas, Southern Florida, and the Gulf coast of Louisiana. Ridgway, in Bulletin No. 50 of the United States National Museum, has still further divided the Red-wing family into: Florida Red-wing (*A. p. floridanus*,) Florida Peninsular (except the Keys,) Valley of Southern Texas; Northern Red-wing (*A. p. fortis*,) interior districts of British America; San Diego Red-wing (*A. p. neutralis*,) southern Calif., and southern portions of the Rocky Mt., plateau; Northwestern Red-wing (*A. p. caurinus*,) British Columbia, Western Wash., Oregon, and Northern Calif. These subspecies differ from the common Red-wing of the east only very slightly in the matter of size, and in general are satisfactory only to the one who discovers them.

DESCRIPTION.

Length, 9.25; extent, 14.5; tail, 3 in. Eye, brown. Bill and feet, black. With the exception of the shoulders, the plumage is entirely black, and more or less glossy. The lesser wing coverts are a bright scarlet or vermilion, and the middle coverts and sometimes the tips of the lesser are a buffy white, thus making the buffy patch nearly equal in width to the vermilion. In the winter the buffy portion of the wing is deeper in shade and the edges of many of the black feathers are tinged with rusty. Female: Above dusky streaked with paler; head with buffy or salmon colored median stripe and supercillary line. Wings and tail dusky, the feathers narrowly edged with whitish. Chin and throat whitish, the latter sometimes tinged with salmon color; rest of under parts are whitish streaked with dusky or black. Immature male: Black; the back streaked with paler and the feathers edged broadly with rusty. Under parts streaked as in the female; lesser wing coverts inclined to be orange rather than the scarlet of the adult male.



BI-COLORED BLACKBIRD.



Photo by R. H. Beebe.

NEST OF RED-WING.



RED-WINGED BLACKBIRD.

BI-COLORED BLACKBIRD.

A. O. U. No. 499.

(Agelaius gubernator.)

RANGE.

Pacific coast region from western Washington to Lower Calif.

DESCRIPTION.

Like the common Red-wing, except that the ends of all the middle coverts are black and the tips of the lesser coverts only very slightly, if at all, tinged with buffy. The scarlet on the shoulder is of the same shade as that on *A. phoenicius*.

 TRI-COLORED BLACKBIRD.

A. O. U. No. 500

(Agelaius tricolor)

RANGE.

South-western Oregon and through Calif. to Lower Calif.

DESCRIPTION.

Lesser wing coverts dark red, bordered with nearly pure white. Otherwise similar to the preceding, except that the bill is rather more slender.

NEST AND EGGS OF THE RED-WINGS.



The nesting habits of all the Red-winged, the Bi-colored and the Tri-colored Blackbirds are practically the same and the eggs cannot always be distinguished with certainty. They nest almost exclusively in swampy places, where their nests are attached to the reeds or to the branches of bushes. Nests have been found as high as fifteen feet from the ground, but they are rarely placed more than four or five feet up, and sometimes are placed in grass tussocks on the ground. The outside of the nest is commonly made of old wet rushes, which are firmly wound about the support, whether it be a clump of rushes or the branch of a bush; it is lined with grasses and sometimes also with horsehair. They nest in colonies and hundreds of them may be found in small swamps and thousands in some of the larger ones through the West. They lay from two to five eggs, very rarely the latter number, and probably most often four. These have a light blue ground, and are blotched or scrawled with black or purplish. The Bi-colored Blackbird, as a rule has the eggs marked with fine lines rather than the coarser



TRI-COLORED BLACKBIRD.

scrawls of the other kinds. Eggs of this bird however do not always differ from the other varieties. In some localities in the South the eggs are laid early in April, while in the North the height of the breeding season is reached the latter part of May and first of June.

HABITS.

Red-winged Blackbirds, being so uniformly distributed throughout the country, are known to nearly everyone. Although robins and bluebirds are popularly known as the harbingers of Spring, their prophecies are not always to be relied upon, and it remains for the Red-winged Blackbirds to definitely announce that severe weather is a thing of the past.

Early in March large flocks of them swarm northwards, making noisy demonstrations at every stopping or feeding place until they reach their final destination. They are very sociable birds among themselves, and for about a month or six weeks after their arrival they do nothing but chatter and eat. As the mating season approaches, the males become more noisy and demonstrative and vie with each other in the skill with which they can show off their beauty to the attentive females. As they stand on a dead branch and stretch to their fullest extent, first one wing, then the other, then both together, it certainly is a beautiful sight and one that is most attractive to the less beautiful but still handsome birds who are watching them. When they have mated, each pair hunts for the most suitable location for a house.

In gathering material for the nest each pair seem to particularly avoid taking it from the immediate vicinity of where the prospective nest is to be. So it is a common sight to see them flying from one part of the marsh to another, with a stalk or rush in their beak. They also gather moist soil with which to hold the nest together; this they do not use to any such extent as the robin but merely enough to answer their purpose, without in any way impairing the exterior appearance of their home. When the outside of the nest is completed, it is skillfully finished on the interior with fine grasses. As the material which is used for the outside is gathered when wet, and the nest is also held together with mud, it is necessary to allow it to dry for a week or ten days before it is ready for occupancy. If the birds are sociable before nesting time, they are a great deal more so after the nests are filled with the peculiar blotched blue eggs. The first signal of alarm from any one of the tenants of the vast apartment house, to which the swamp may well be likened, will bring every other tenant to the rescue. Each one perches at the end of a limb near the seat of the trouble, and with the vehemence of his outcries causes the branch to sway back and forth. Until the cause of the trouble is removed, this din is continued,



WHERE THE BLACKBIRDS NEST.

now dying down and then again renewed with greater vigor. Their anger is alternately expressed by an emphatic "chack, chack," or a long, shrill, whistling "zee-hee." For those who consider all birds strictly in accordance with their economic value, I might say that Red-wings are, like a great many other things, very valuable in some sections of the country, while they are equally destructive in others. They destroy large numbers of cut worms and other injurious insects, eat quantities of seeds of obnoxious weeds, and in some sections of the country feed freely on the hosts of locusts that invade the fields.



FEMALE REDWING.



Photo by Geo. C. Embody,
NEST OF RED-WING SHOWING LOCATION.

EXTRACTS FROM "THE STORY OF A MARTIN COLONY."

BY J. WARREN JACOBS (See page 215.)

Before the advent of the English Sparrow in this community, the Purple Martin found numerous friends and admirers among the people, who encouraged it by erecting beautiful bird-houses for its accommodation.

Every bird house in town eventually became crowded with sparrows and instead of the twitter of the industrious Martins, bubbling over with happiness, the monotonous jingle of the sparrows became the rule, changing the charm of the Martin houses into rasping "chatter-boxes." The sparrows had their day however, and people who had either encouraged them or treated them with indifference, began a crusade against them by killing them and tearing out their nests. Persons who had Martin houses fostered the return of the Martins until now the birds are increasing. The desire to have Martins coupled with a determination to oust the sparrows, which nested about our building, prompted me to erect a martin house in 1896 and established a colony which has grown to large proportions, necessitating additional houses until now the birds have ninety-nine nesting rooms at their disposal, about three-fourths of which were occupied in 1902.

The weather affects their return very much, but generally by April 5th several individuals can be seen. The first arrivals usually come singly, are males in adult plumage, and stay only a few hours; they disappear as quickly as they came. Then they come in small bands and later in large numbers. Nest building covers a period of several days, the male assisting, though he often gets in the wrong room. They collect twigs, straws, bits of wood and grass from the garden and street and along the creek. The eggs are deposited in a close cluster in the center of the nest, and, after the set is complete, are partly covered with bits of apple leaves. From three to six and rarely seven are laid. Incubation lasts from twelve to fifteen days, the female, I believe, attending to this duty exclusively. The height of the hatching period is from the 10th to the 15th of June. The young, when they first leave the egg shells, are repulsive looking objects with large heads, eyes closed, and small shiny bodies without down. After the fifth day the birds grow very rapidly and are clamorous for food. At the end of eighteen days the young are pretty well feathered, and somewhat resemble the mother birds. From twenty-four to twenty-eight days elapse from the time the young break the shells until they are strong enough to leave the nest and safely soar away with the parents during the day.

My records show a total of about eleven hundred and fifty eggs laid during the seven years; and the number of young reaching maturity eight hundred and fifty.

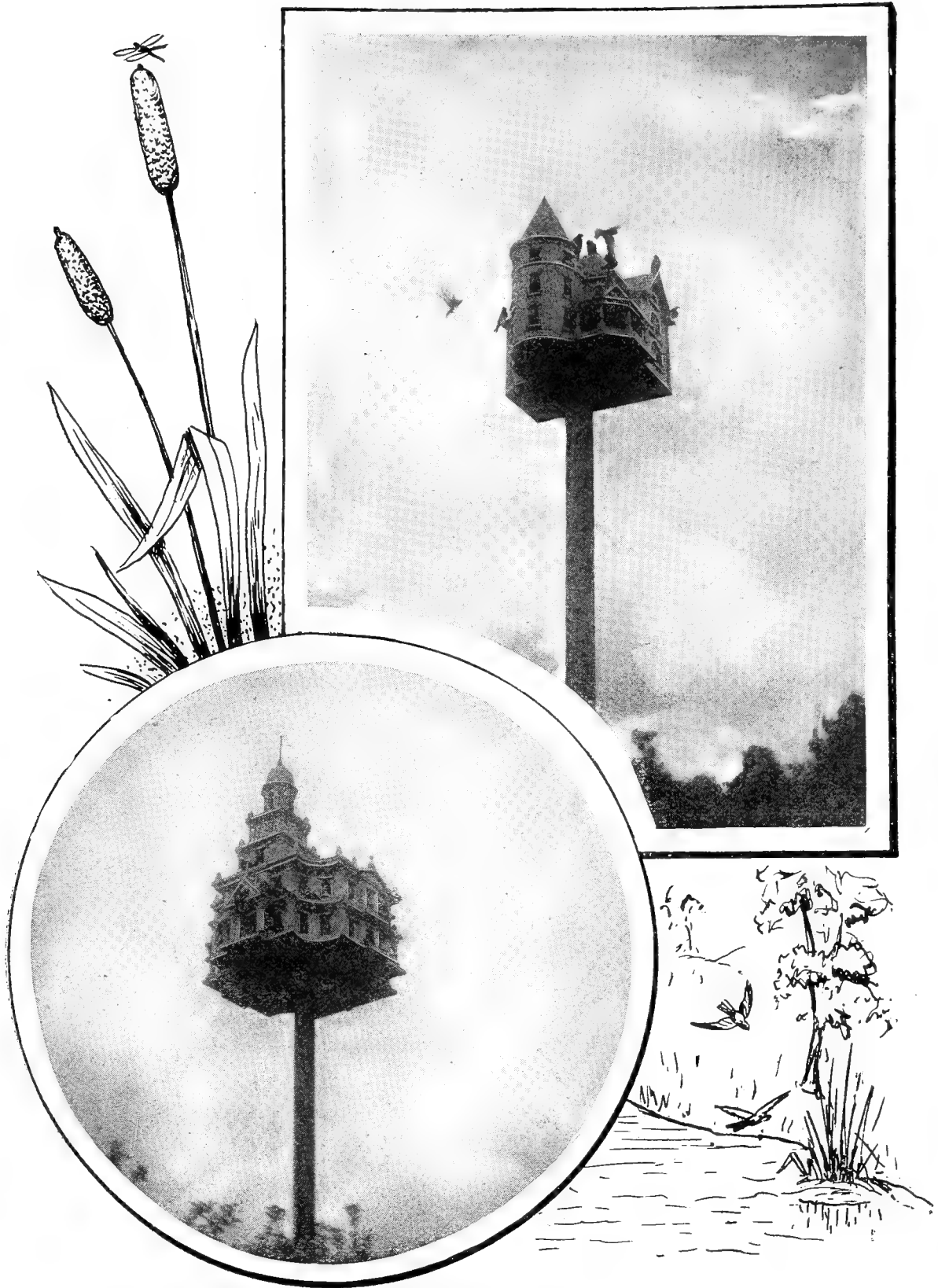


Photo by J. Warren Jacobs.

COMING HOME AT EVENTIDE.

ANSWERS TO QUESTIONS.

Lewis A. Davis:—As you have not yet got your camera and are expecting to use it extensively for the photographing of birds and nests, I would strongly advise against getting one that uses films exclusively. I have no personal objection whatever to the Kodak, in fact I own three of them of various sizes, but I would not think of using them for obtaining bird photos. I will briefly sum up the advantages and disadvantages of both films and plates. Films are much lighter than plates, are easily handled, and do not break. On the other hand they are only about one-half as fast as plates; they cost about half as much again; they are more subject to imperfections, which while they may not be of frequent occurrence, are sure to come on a very valuable negative if at all. Plates are comparatively cheap, and what is of the utmost importance they are extremely rapid. Of course others may have different views, but I have had considerable experience in bird photography and have tried both plates and films on the same subject at the same time with infinitely better results with the former.

Geo. W. Fisk:—I enclose photo of a grebe that was found on the beach here. When I approached, it came sliding towards me and did not seem in the least afraid. The bird was thin and hungry and when I held out a clam to it would swim to me and take it. Can you tell me what it is?—The bird in the illustration is a young Horned Grebe. The adults in winter look very much like this. It is only in the spring and summer that they have the tufts and chestnut markings.

F. E. Wait:—The birds referred to in your first question are probably Pine Warblers which are shown in this month's color chart. These birds migrate in flocks through Mass., in the Fall. The second bird is the Fox Sparrow. It is known by its large size and bright rufous markings. They migrate in the Fall with juncos or in flocks by themselves. The cowbird's egg has a light grey ground and is thickly specked over the entire surface with reddish brown and black. The nest you mention in question 4 is that of the wood pewee. The least flycatcher builds its nest in the crotch of a tree, while the pewee builds on a horizontal limb and covers the outside of the nest with lichens. The A. O. U. number of the slate colored junco is 567.

H. Gebser:—You are in error in regard to the eggs of the Wood Thrush. The color is correct as described in the Nov. A. O. The egg that you call a Wood Thrush is a Brown Thrasher. The egg of the Yellow-billed Cuckoo is larger and paler than the Wood Thrush, which is

similar to a robin's except in size. All the American thrushes have blue or greenish blue eggs, plain except the Russet-backed which is marked with large pale spots of reddish brown.

Norman W. Swayne: We shall have a photographic competition this year full particulars of which will be published next month.

Alfred J. Meyer, 330 E. 14th St., New York:—Can any of the readers of A. O. tell me where I can find a nest of the Great Blue Heron this spring. Having made some good pictures of some of the more common herons I am very desirous of trying my luck with the Blue.

L. L. Haskins:—The bird which you describe is the black-throated bunting or dickcissel. It is fairly common in Wisconsin. The prairie horned lark and the white-rumped shrike are found in Wis.

BOOK REVIEWS.

Camp Fires in the Wilderness, by E. W. Burt (\$1.00, The National Sportsman, Boston.) A 200 page book of general information in regard to trips in the wilds of Maine, Canada, New Brunswick, and on the Great Lakes. Descriptive of the wild life to be found in these sections and the equipment necessary to take in order to thoroughly enjoy it. Well illustrated with half tone engravings.

The Story of a Martin Colony, by J. Warren Jacobs, Waynesburg, Pa. paper; 24 pages and three plates; 35 cents. An admirable monograph on the purple martin, based on careful records covering a period of seven years. Introduction and chapters on: Topographical Sketch and Existing Condition of the Premises and Vicinity; Establishment and Subsequent Increase of the Colony; Return from the South; Nest Building, Deposition and Number of Eggs, Incubation; The Growing Young and the Parents Care; Something About Their Food; Their Enemies, Causes of Death, etc.; Off to the South; A Cabinet Series of their Eggs; On the Construction of Houses.

A writer in Bird-Lore (The Macmillan Company) record an instance which seems to prove the possession of a surprising memory on the part of a bird. She so tamed a White-breasted Nuthatch in Central Park, New York City, in the winter of 1900, that the bird came to her at sight, whenever she appeared in the park. In April, 1901, the bird disappeared and did not return the succeeding winter; but in December, 1902, apparently the same bird reappeared, and recognizing its friend, at once perched upon her hand in search of the nuts it had been accustomed to find there, two years before.



Address communications for this department to
 MEG MERRYTHOUGHT, 156 Waterville Street,
 Waterbury, Ct.

MY DEAR YOUNG FOLKS:

We are glad to hear from so many of you; of your outings, of your wayside friends, and the good words and wishes you have for us.

Do not be disappointed if what you write is not printed, for it would need a larger magazine than this to contain all of your letters.

Someone asks if there is an age limit in this department. The only limit is a young heart, which enjoys our young people, all such are heartily welcomed to a place in our corner. Some of those whose names appear this month in our Roll of Honor sent answers to the December puzzles too late to be published in the February Bird Chats.

The bird descriptions given in one paper by one of our young folks, are very accurate, and show patient study of the birds. You see a Massachusetts lad comes close to our high water mark with his list of one hundred and twelve birds. I am proud of any boy or girl whose list reaches one hundred.

Our lists for 1903 will grow pretty fast in April and May; be sure to *know* the bird before you add him to the list. Who will report the arrival of the first migrant? Robins and bluebirds are excepted, for some spend the winter North. Paul Rawlin's interesting account of some Iowa birds, and enigmas from Marietta Washburn and Wm. Schneider are crowded out of our corner till the April number. The other day I saw the goldfinches playing in the streets with those little rascals—the English sparrows; after finding them in such bad company I can now more readily believe the charge made against them last month.

Cordially,

MEG MERRYTHOUGHT.

ANSWERS TO FEBRUARY PUZZLES.

Charades—Crane-bill. Whip-poor-will.

The bird described by Wilson—Stormy Petrel or Mother Carey's Chickens.

ANSWER TO JANUARY ENIGMA.

The trusting little fellow
 That runs twittering in the snow,
 Is the beautiful Snow Bunting,
 As we easily may know.

And the bird that we think cruel
 Is the snowy northern Shrike,
 For he sits upon a bough
 And tries at little birds to strike.

MARY A. JOHNSON, Mo.

 ROLL OF HONOR.

Gerald B. Thomas, Livermore, Iowa. Stafford Francis, Exeter, N. H. Harris H. Gilman, Winchester, Mass. Charles H. Rogers, N. Y. City. Clair McMorran, Spokane, Wash. Edith M. Little, Waquoit, Mass. E. Louise Jordan, Defiance, Ohio. Marjory Lester, Kinsley, Kans. Mary A. Johnson, Kansas City, Mo. Leroy B. Noble, Cromwell, Conn. Marietta Washburn, Goodwin, S. D. Wm. Schneider, LaCrosse, Wis. Lillian Weeks, Marietta, Ohio.

 FROM OUR MAIL BAG.

Where I was this summer there were a great many Great Blue Herons. On one of the drives we took we saw sixteen of these beautiful birds standing close together, and on the same drive we saw four more, making twenty in all.

There were about ten quite near the house in a mill pond of salt water. The tide did not go out of this at low tide. There was a long point running out into the pond, with no trees on it, but only grass a foot high. The herons would stand at the end of this point so that they could see any danger approaching. One day I crawled out on the point. I had to be very careful and lie flat, for if I rose up beyond the top of the grass they would fly. There were two on the point at the time, and I watched them for a long time. They would stand there in the water about a foot and a half deep, and wait for the fish to come near them, and then opening their mouths they would put their heads under water with a sweeping motion, and then lift their heads high in the air and let the fish run down their throats.

There were also Bitterns, Little Green Herons, and Night Herons at the beginning of the point.

HARRIS H. GILMAN,
 Winchester, Mass.

Can anybody explain why White-breasted Nuthatches come every other winter to Central Park? I have studied them there for three winters, and they were present in 1900-01 and they are here this winter, but not last.

A friend of mine has had the same experience. White-throated Sparrows are much less numerous this winter than in the two previous ones.

I saw a Winter Wren and a Carolina Wren on Dec. 2d and Red-headed ducks.

CHAS. H. ROGERS, N. Y. City.

While skating, I noticed a lot of Red Crossbills feeding on the seeds of some low bushes. I crept right up to them and they were so busy that they didn't notice me, and I touched one with a short stick. A boy could have killed a lot of them if he wanted to, because they were so tame. I know a man who caught one in his hand.

STAFFORD FRANCIS, Exeter, N. H.

I like American Ornithology fine. It is the paper for every true bird lover.

EDGAR BOYER, Grand Pass, Mo.

I saw in your department that a Massachusetts boy had a record of ninety-three birds, and that two other lads had exceeded this number, the largest being one hundred and fourteen. I now send in my list which is one hundred and twelve—just between the two highest, and I hope that Massachusetts will at least have second place. I hope to see other records in the magazine.

PEIRCE H. LEAVITT,
Cambridge, Mass.

TO AN EAGLE.

Oh, Eagle, with thy mottled breast,
On wings untiring never rest.
High up into the air you fly,
Yea, almost to the azure sky.

From mountain crag, and lofty peak,
We hear your wild untamed shriek,
We wish a long, long life to you,
The noblest bird we ever knew.

PEIRCE H. LEAVITT.

NUMERICAL ENIGMA.

At the evening 6, 2, 8, 7, there was a 10, 8, 9, 6, in the green 1, 2, 3, 4, 9, broken only by a great grey owl which 10, 3, 2, 5, 11, 4, from the branches of a tall 5, 7, 11, 11. My footsteps made no sound, for a 12,

10, 3, 1, 11, 7, had dampened the earth. I 9, 5, 3, 2, 4, hidden by a thicket not far from where the brook 7, 8, 9, 10, 11, 4, down the slope, and waited, and listened for an invisible choir. Hark! The dusky arches echoed and re-echoed with the sweet melody of my favorite birds—the 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and I “listened as if I heard an angel sing with news from heaven ”

WHAT ARE THEIR NAMES?

Number 1. About the size of an English sparrow. Male—Brown above, blotched and splashed with darker brown, shoulders tinged with Indian red, a gray line over each eye. Eye black; chin white, a conspicuous black spot on the throat. Breast sulphur yellow, shading to whitish underneath. Wings brown, some of the feathers being edged with lighter brown. No bars on wings. Bill horn colored. They build their nest in a bush or other low place, never far from the ground. The nest is cup-shaped and compact, composed of coarse grass, parts of corn husks, etc., and lined with fine grass blades and stems. Four to six eggs, a trifle deeper blue than the bluebirds. While the female is sitting the male will usually be found near by, perched upon a conspicuous branch, where he sings over and over, a few notes like “teck-teck-teck-twit-twit-twit,” the last three notes uttered in quick succession.

EDGAR BOYER, Mo.

Number 2. This bird arrives here in the spring, about the first of May. Male—Length six and three quarters or seven inches. Head, neck, and upper back olive green. Rump and tail yellowish olive. The wings are dusky, the coverts being tipped with yellowish, forming two indistinct bars. Chin and throat velvety black. Breast and underparts yellow. Female—Like male except that she hasn't the black throat and chin, hers being yellowish. She is also duller and smaller. These birds build a nest like the Baltimore oriole, and always hang it high up in the tree. As the nest is always so difficult to reach I never saw the eggs. The male may be heard singing all the day, as he flies about in the trees feeding on the insects and worms he finds in the foliage. His song is something like that of the Baltimore oriole.

EDGAR BOYER, Mo.

Number 3. While walking yesterday, a small flock of birds lit in the bushes several rods away. From what I could see they were brown, with a dark spot under the chin, and a slightly forked tail. They were about the size of an English sparrow, or a trifle smaller, and resembled the goldfinch in flight and voice. They were quite shy, and I could not get very near to them.

GERALD B. THOMAS, Iowa.

I was especially interested in the goldfinch episode as related on page 38 of the January number, as a similar experience once came under my own observation. A goldfinch flew into my neighbor's parlor, where an invalid girl lay upon the sofa. The bird was frantic over its limitations, as wild birds usually are, and could not be caught to be given its freedom. As it was rushing from one window to another and beating its wings vainly against the glass, the sick girl spoke softly to it, at the same time holding out her hand to the frightened bird.

To the intense surprise of all present the bird listened, came at once to her hand, and rested there in perfect contentment seemingly.

It showed no fear as she stroked its feathers gently, nor did it leave her hand till it was fast asleep at night, when she placed the little golden ball upon a picture frame within reach. For two or three days it hovered about her couch, resting upon her hand whenever it was allowed to do so, and sleeping upon the same perch above the picture, as happy in her companionship as it could have been with its own kin so regally apparelled. After a few days its little life was over. The family have it still mounted and given a place in the same room. The bird recognized something in the girl akin to sympathy, a power not confined to this bird alone, for I have known her to call the bluebirds to her chamber window. I have often wondered at it—what it was the tiny creature recognized in the stranger?

NELLIE HART WOODWORTH,
St. Albans, Vt.

GLEANINGS.

The river was numb, and could not speak,
For the weaver Winter its shroud had spun;
A single crow on the tree-top bleak
From his shining feathers shed off the sun.

LOWELL.

I stood and watched by the window
The noiseless work of the sky,
And the sudden flurries of snow-birds
Like brown leaves whirling by.

LOWELL.

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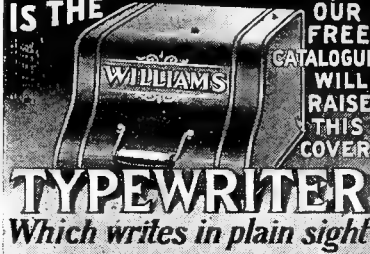
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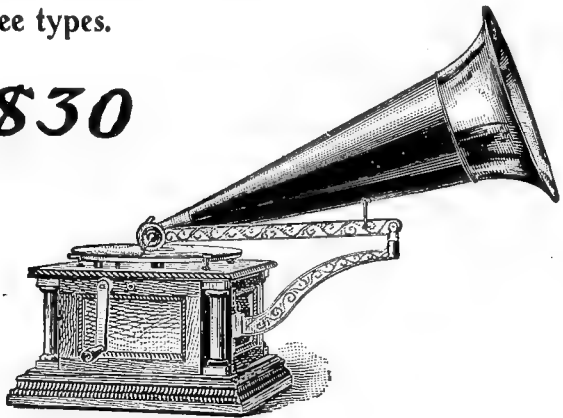
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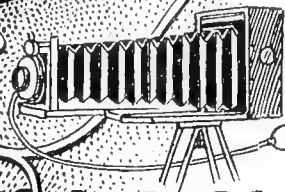
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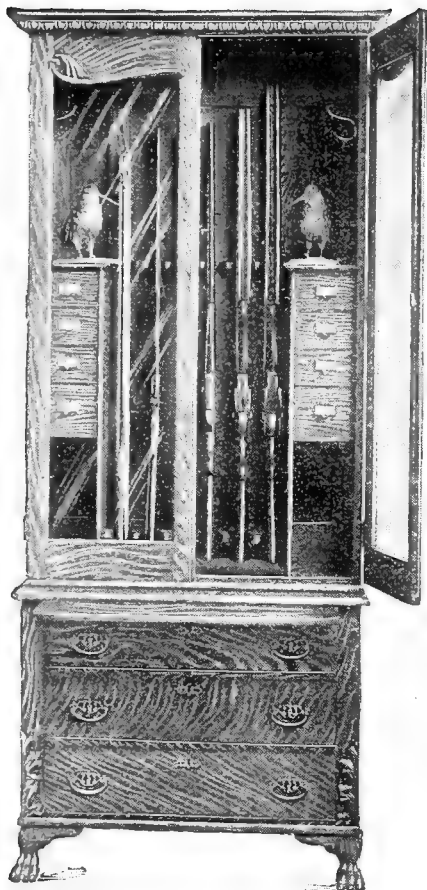
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PHOTO CONTEST

—FOR 1903—

We have decided to divide our photo contest this year into three classes; the reason for this is that it is obviously hardly fair to judge between the merits of a photograph of an adult wild bird, a young bird, and a photo of a nest and eggs. Therefore we have subdivided the contest into these three classes.

CLASS I. FREE ADULT WILD BIRDS. These may be on the nest feeding the young, or in the brush or field. We shall NOT, however, consider CAPTIVE birds, or birds that have been wounded, whether they be tied out of doors or photographed free in the house or gallery. Awards as follows:

1st, \$10.00 cash; 2nd, \$5.00 pair of Field Glasses; 3rd, \$2.00 cash.

CLASS II. YOUNG BIRDS. These may be photographed in the nest or placed on suitable branches; in either case take great care not to do them any injury. Awards as follows:

1st, \$10.00 cash; 2nd, \$5.00 pair of Field Glasses; 3rd, \$2.00 cash.

CLASS III. NEST AND EGGS. Nests must be in the natural situations actually chosen by the birds, although of course it is permissible and desirable to tie back all branches and leaves that will mar the picture.

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All photographs which we retain for publication, whether prize winners or not, will be paid for at the uniform rate of 50 cents each, irrespective of the class.

All photos which we shall be unable to use will be returned to the owners.

We make no senseless rules barring professionals, and as a matter of encouragement to amateurs, will say that it is a fact that as a rule amateurs can do better work out of doors than can a professional, and a person who has never before used a camera for bird work may at the first attempt get a picture that can not be equalled in years by themselves or others.

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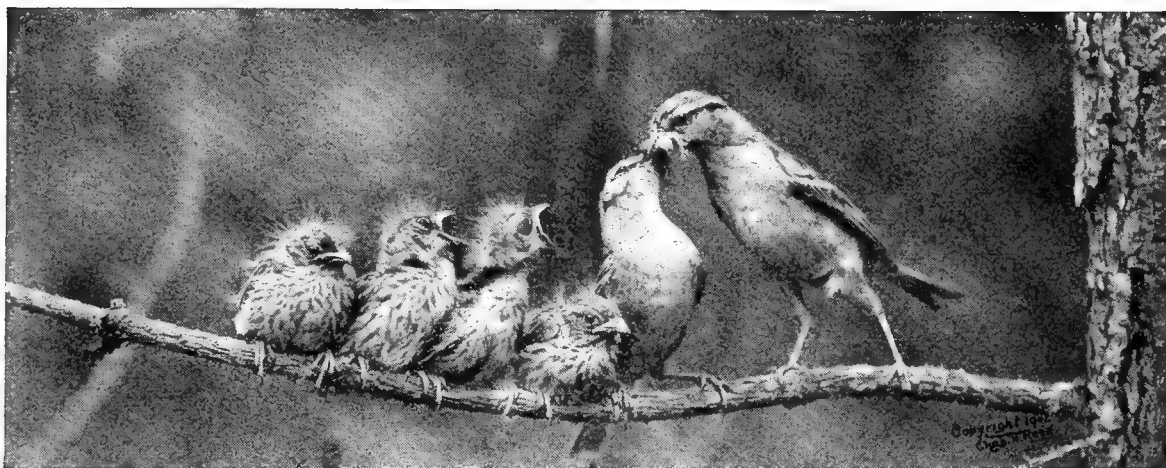
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PREPARING BREAKFAST.

This is the companion photograph to the above, and is very nearly its equal, and perhaps more interesting because of the supplicant attitude of the young birds, as they watch their parents breaking the green worm which is to form part of their dinner.

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VOL. III

APRIL, 1903.

NO. 4.

In the center of this number we have bound the sheet containing the Red-breasted Nuthatch. By bending up the wire staples this may be removed from this number and inserted in its proper place in the Feb. number.



On another advertising page, we make our offers for photos for the coming season. We have made three classes for prize photos and all prints submitted will be judged without partiality.



During the next three months more birds are to be seen than during any other part of the year, and during these months a great many more people are interested in observing. Will not you make special effort to bring this magazine to the notice of your friends and acquaintances during this period? It will be for your interest as well as for ours. On one of the advertising pages we offer a number of inducements for you to do so. The Chippy Family is still given to every subscriber during 1903 and the companion piece, "Preparing Breakfast" will be given to every subscriber sending us a new subscription.



Fig. 1

Photo from life by C. A. Reed

ARE THEY HUNGRY ?

CEDAR BIRD.

A. O. U. No. 619.

(Ampelis cedrorum.)

RANGE.

Found through the whole of North America south of the Hudson Bay territory. Breeds from about the middle of the U. S. northwards.

DESCRIPTION.

Length, 7.25 in.; extent, 12 in.; tail, 2.5 in. General plumage a soft grayish brown. Head crested. A black stripe through the eye. Chin black. Tail tipped with yellow. Secondaries sometimes tipped with a peculiar vermilion waxy substance.

NEST AND EGGS.

Cedar Birds nest late, and rarely are full sets of their eggs found before the latter part of June, and often the eggs are still unhatched by the end of August. They show little choice as to the kind of tree in which to build their nest, and place it at heights varying from three to twenty feet, as the extremes. They lay from three to five greenish gray eggs that are sparingly marked with angular shaped spots of black or very dark brown.

HABITS.



Photo from life by C. A. Smith.

HOSE who are the fortunate possessors of a cherry tree in their yard or garden are generally the ones who are the least interested in birds except with a view to exterminating them. Unfortunately the Cedar Bird, or "Cherry Bird," is a connoisseur of fine fruits, with a special liking for ripe cherries, either wild or cultivated. There is no question but what they destroy large quantities of this fruit, but it seems a pity that they cannot be frightened away instead of slaughtered by thousands as they are every year.

In the spring and fall Cedar Birds vary their fruit diet and destroy large numbers of insects, particularly the canker worm that annually works such destruction in the apple orchards. Except during the nest-



Fig. 2.

Photo from life.

CONTENTMENT.

ing time they go about in flocks of from six to twenty individuals. The most marked peculiarity about them is their silence. A flock of fifteen or twenty will perch in a wild cherry tree for an hour or more and not a sound will indicate their presence except perhaps the occasional falling of a cherry which one of them has accidentally dropped. It seems incredible that so large and sociable a body of birds could maintain so strict a silence; it resembles a gathering of deaf mutes, and such in fact they might almost be called for their nasal hissing or twittering whistle is hardly loud enough to be deemed a note.

Cedar birds have a roving disposition especially in winter. This period they pass in the large cedar swamps where they subsist on berries and seeds. During continued intervals of mild weather they will venture out into the more open country and be seen about settlements. I am inclined to think that the birds that winter along the northern borders of the United States are mostly some that have come from farther north and that those which breed here in the summer migrate a little farther south. They remain in flocks until the beginning of the breed-

ing season in the latter part of June. Even then they will be seen in numbers in favorite cherry trees, but they come and go as individuals, and not in a flock. Their nest is constructed of weeds, grasses, rootlets and moss skillfully interwoven, and is lined with fine grasses. In favorable localities they seem to prefer to place the nest in an apple tree, and in New England at least, I have seen ten in an apple orchard to one in any other kind of a tree. Although nearly as large as a Robin's nest it is not nearly as easy to see, for they seem to be more skillful in concealing them with overhanging leaves. Their manners during the nesting period are of unusual interest, because of the differences they present from those of other birds.

On June 15th of last year a Cedar Bird was observed gathering cobwebs from a caterpillar's nest. This she carried to a lone apple tree standing in a large meadow and only a short distance from one of the boundary walls. No investigation was made at the time, but a note was taken for future reference, and on June 30th an examination of the tree revealed a typical Cherry-bird's nest containing four eggs. The



Fig. 3.

DISTURBED.

Photo from life.



Fig. 4.

DISCUSSION.

Photo from *ife*.

nest was about seven feet from the ground and was occupied by the owner when it was found. As usual with these birds she showed great persistency and refused to leave the nest until I had pulled the branch down to a level with my eyes. This apparent lack of fear might be attributed to any one of three conditions—desire to protect her treasures; a belief that her somber plumage renders her invisible; or to stupidity. I have not yet been able to determine which of these conditions influences them, and it may be a combination of all three. At times we admire their bravery, and at other we deplore the foolishness that leads them to allow their enemies to approach within reaching distance. Some claim to exert a personal influence over the birds and that the latter can recognize their friends from enemies. 'I have never seen any one who could demonstrate that he had more influence over the actions of wild birds than any one else, and I am sure that one person can approach as closely to a bird as another, provided that he does



NEST AND EGGS OF CEDAR BIRD.

Photo by J. B. Pardoe.

not by his actions show that he is intending to shy a stone at them.

This pair of Cedar Birds made an unfortunate choice of a nesting site, for they had built their house on two separate crossing branches. Every time the wind blew their house was rocked to and fro, and the contents were in imminent danger of being spilled out. As we did not wish this calamity to happen we fastened the branches firmly together, and then as an additional precaution tied the nest more firmly to the branches. Probably the birds did not appreciate this kindness, but undoubtedly it was the means of saving the lives of the young as will be seen later. While we were busy making over their home as we thought it should be, both birds were perched upon the topmost branch of the tree uttering their feeble protests.

It was twenty days before we again visited the nest and when we were a long way off we could see that the nest was there all right, and that the adults were now busy in feeding the young. They both left the nest as we approached and flew about overhead until they calmed down sufficiently to alight upon their observation twig and watch to see what we were about. As soon as the branch was touched, up flew four heads with wide open mouths, the blood red color of the interior of which is so different from other young birds. They were repulsive looking objects, with just a suspicion of pin feathers appearing on the wings. As soon as they found that no food was forthcoming, they subsided and cuddled down in the bottom of the nest while we were making our preparations.

The limbs were tied down to a large stone so as to bring the nest at a height of about five feet from the ground; all intervening branches were tied to one side and a thread attached to the one that shaded the nest from the sun. After seeing that the picture was satisfactory on the ground glass, we retired to the other side of the stone wall. Later it was found that neither one of the birds would come near the nest when we were on the same side of the wall and in sight of them, but as soon as we were concealed behind the wall, the female did not hesitate to return to the nest and after a time she persuaded or commanded her mate to do the same. Although they could see us whenever they flew out from the tree, they did not seem to be afraid, nor were they scared by the camera. Their only fear seemed to be that we would see them when they went to feed the young.

After they had found that we had not harmed their little ones, the female flew away after food, leaving the male on guard. Upon her return, the two parents talked matters over for a few minutes, and then she slyly hopped down, branch by branch until she was beside the nest. Although to all appearances she had brought no food, she had a plenti-



Fig. 5.

THE HAPPY FAMILY.

Photo from life.

ful supply concealed in her throat and crop, for Cedar Birds feed their young by the process of regurgitation. Sometimes the food is administered to the little ones in a well masticated condition and again it may be in its natural state. As she stepped up on the edge of the nest, all the young heads were elevated and she assumed the attitude of inspection shown in Fig. 1. After watching them intently for a few moments, perhaps to find out which one was the most hungry, she threw her head forwards and upwards and in her then wide open bill, appeared a bright red cherry: This was immediately thrust down the throat of one of the young and she assumed the watching attitude again. Evidently she concluded she had fed the wrong one, for she soon removed the cherry from the throat of the little one who was just commencing to enjoy his meal, and placed it in the open mouth of one of his brothers. It is said that the old birds can tell by the muscular action of the throat whether the young are ready to receive food or not. Certainly to look at the four young ones in Fig. 5, one would conclude that they were all equally hungry, but if this theory is correct you can not always judge by appearances, for it is a very common occurrence for them to transfer the food from one mouth to the other. Personally, I

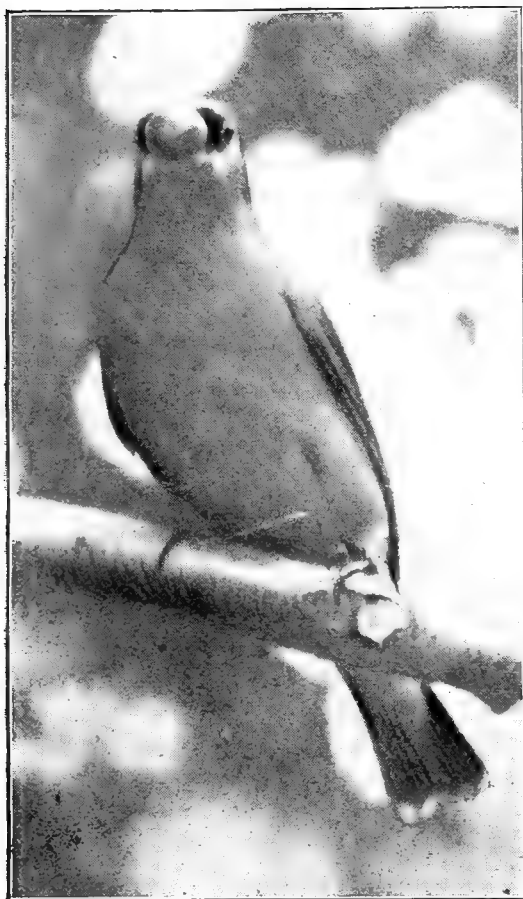


Fig. 6.

Photo from life.

RIPE CHERRIES.

am inclined to believe that they are training their little ones to follow a custom that is peculiar to adult Cedar Birds. Frequently when a number of them are feeding on the same branch in a cherry tree, one will seize a cherry, pass it to the next, who in turn will hand it along to another. A number of times I have seen a cherry passed to three individuals before it was finally eaten. These two birds seemed to have a regular system in going after food. After we had watched them for some time, we found that they always made their little journeys in company with two other Cedar Birds. The three of them would fly to a cherry tree in the yard of a house about a quarter of a mile away, where they seemed to have no difficulty in finding a number of belated cherries. On their return our bird would leave the trio when

directly over the nest and shoot downwards to the top of the tree; the other two continued and by watching with the glasses we found that one alighted in a tree in the next pasture, while the other one continued on out of sight. The two birds at what we called our nest nearly always took turns in making these excursions and very rarely did both of them leave the vicinity of the tree at the same time.

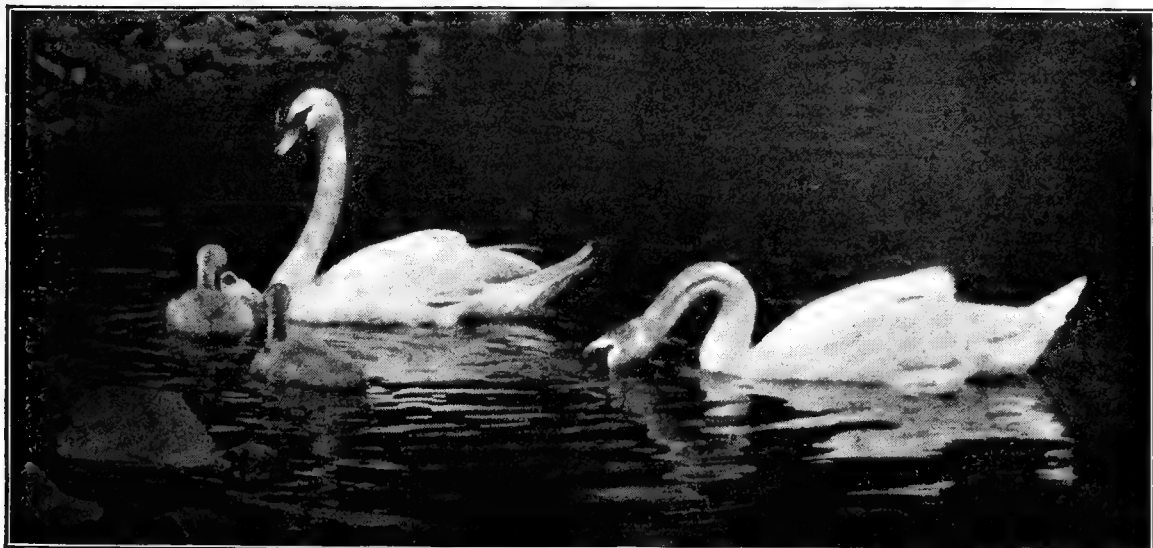
I had long since been familiar with the scared attitude of the incubating Cedar Bird upon being approached, but it remained for this pair of birds to show me that they did not always sit in that uncomfortable attitude. The photograph shown in Fig. 2 was made while the bird was brooding her young and we were concealed back of the stone wall. After making this picture, Fig. 3 was made immediately, it being necessary to change the plate holder and reset the shutter, thereby bringing the hand within less than four feet of the bird. Although her appearance indicated great fear, she did not leave the nest even when I made the exposure and made ready for another. It was only after a long wait that both the birds came to the nest together. Nearly all the time when the female was brooding the young, the male sat on a limb in the shade and only a little back of the nest. At one time the



Fig. 7.

Photo from life.

female rose to the edge of the nest and looked at her partner in a threatening manner and with mouth partly open. He understood the manouver if we did not, and at once came to her side. Fig. 4 shows him at the left just after he had gone through the motions of "coughing up" a partly digested cherry. It can be indistinctly seen along the edge of his bill. Fig. 5 shows the female at a little later period in the same operation. Failing light now necessitated our return home and it was two weeks before we again saw them. In the meantime we had a terrific thunder storm, accompanied by a heavy fall of hail. It was with feelings of misgiving that we approached the spot, but the string mentioned previously had done its work, and the nest, though somewhat awry, was still there, and the overhanging branch had warded off the hail sufficiently to allow the suffering mother to maintain her position. As we came near, both birds left the nest, and the young, who were about ready to fly, all stretched their heads forwards as far as possible in the same manner as the adults. In the meantime it had clouded up, and all our attempts to get a satisfactory picture of the young birds were unavailing. Try as we would, we could not get the four of them to sit on a branch at the same time. If one was not poked off by its neighbor, he would flutter off on his own account, and before leaving would be sure to grab the wing of the one nearest him, and pull this one along too. We did not even get a good picture of one of them alone. Although they can look pretty, they all seemed determined to act just as meanly as they could and would take the most ungraceful of attitudes. Fig. 6 shows one of the adults just as he has brought a cherry up to his mouth. This was for a youngster who was perching on the limb at his left. Fig. 7 shows the female and one of her hopefuls. It was taken just before another cherry appeared. We repeatedly saw them bring two and three cherries from their throat, and on one trip one of the birds brought four. They were ever on the alert for insects too, and time after time, they would dart out from their perch on the top of the tree and return with unsuspecting insects.

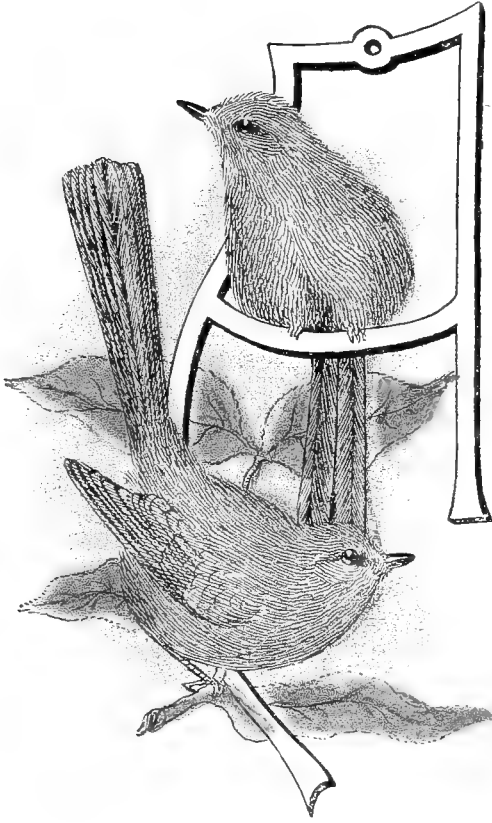


THE SWAN FAMILY.

Photo from life.

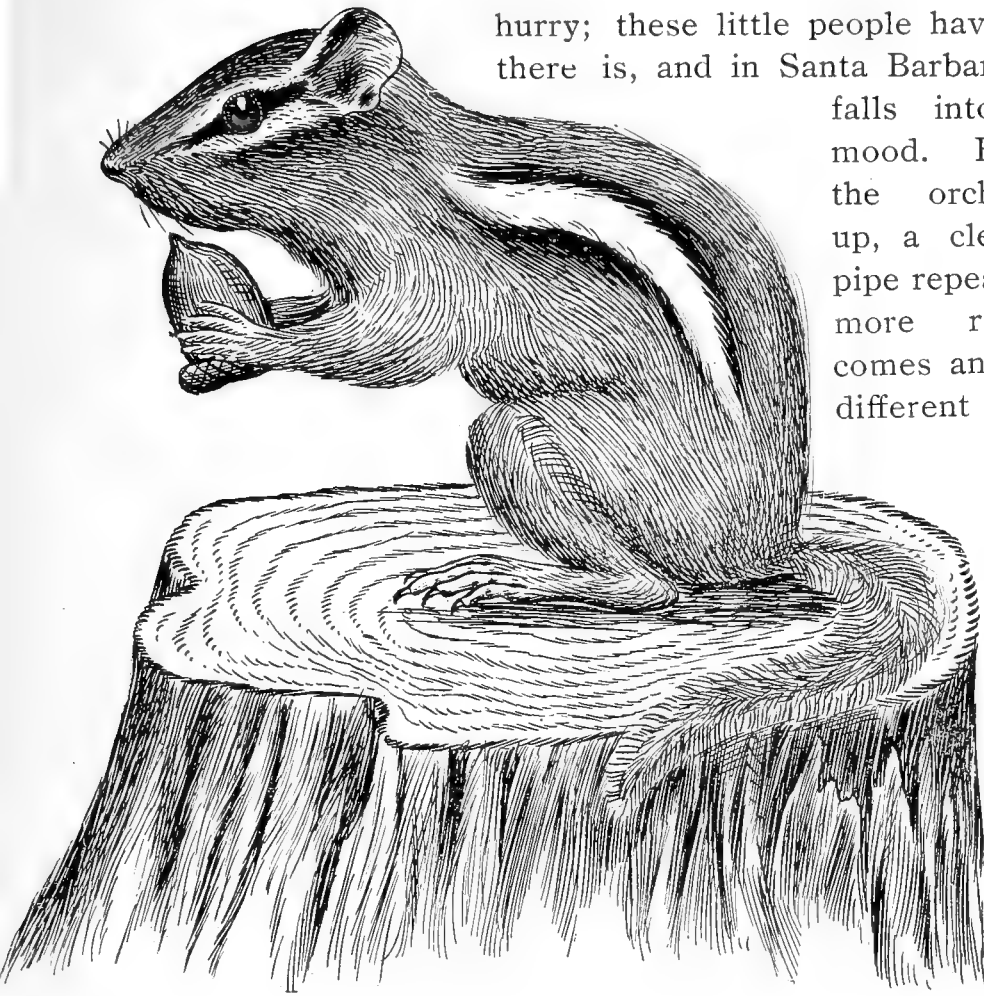
DWELLERS ON THE GROUND FLOOR.

(WINTER NOTES FROM A SANTA BARBARA CANON.)



NY one who wishes to see a new side of bird life has only to take up the point of view of the birds that choose to live close to the earth and give up their prerogative of swift and airy flight in exchange for the safety which is found in thickets and low-growing tangles of bushes. These birds are perhaps the hardest of all to get a good sight of ordinarily. When frightened they refuse to fly, but slip away noiselessly among the brush, or stay crouched where their dull colors make them invisible. Some of the sparrows that have this habit are rarely seen, though fairly abundant. But now throw yourself on the ground in one of those tangles of chaparral beloved of

sparrow and bunting, and if you have long days of leisure, you will see sights that will repay you. Besides, you will never pity the wild things again, houseless in wind and storm, for you will find that no matter how the March wind blusters overhead, there are nooks and tiny glades among the roots and bushes where the air is always warm, and where the sunshine filters through, giving a tempered shade, quite different from the sombre shadows of a full grown forest. Then, too, you feel an absolute security from interruption. You know what a tussle you had with thorn and tangled vines to reach your retreat, and you feel, as the birds do that there is nothing to bring meddlesome human beings to such a place. Overhead is a light screen of miniature boughs, tiny branching arcades run in every direction, along which an interesting woodland visitor may arrive at any moment. Underneath you will find the softest, lightest bed already spread for you. Rolls of reddish bark from the ceanothus and manzanita bushes, the dried seed-pods and curled up leaves collecting year after year in this dry climate makes a light, clean cushion, on which you will easily fall asleep between the acts. And now we have taken our place and are waiting for the curtain to rise and the woodland drama to begin. There is no



hurry; these little people have all the time there is, and in Santa Barbara one readily falls into the same mood. First you hear the orchestra tuning up, a clear, sustained pipe repeated more and more rapidly, then comes an answer on a different pitch, then another, till all the woods ring on every side. You imagine a large, brilliant performer, far in the distance, some lark or thrush; and with this idea may seek years,

as I did for the hidden musician, never noticing the tiny ash colored mite in the bushes at your feet. Wonderful volume of sound to come from such a tiny body. He has a way of making his voice sound as if it came from a great distance, and indeed it does come a long way, for in the evening I have often heard it from a canon half a mile away. The tiny musician proves to be a companionable little fellow; if you are not too proud to take a lodging on the ground floor. He is the Wren-tit (*Chamaea fasciata*), a bird peculiar to California. He is clad in sombre brownish ash, with fluffy plumage. There is something semi-comic about the expression of his great, round eye, as he stands on a low twig and strains every muscle, down to his quivering tail, to utter a louder pipe than his neighbors on the other side of the oaks. His little bride is exactly like him, and they are very devoted and constant companions. In fact I never saw a Wren-tit alone. This shrill pipe is not the only note they use. They have also a scolding tone with which they rebuke any unwonted stir among the audience, and a soft babyish chirp which is reserved for love

passages. At such times the pompous strut and quivering wings of the little man are very comical, and he makes the most of his loosely hung tail, jerking it up and down to punctuate all his remarks. Now they have hopped away together and the woods are silent again.

Bye and bye a slight rustle in the dried leaves announces a new arrival. If you keep perfectly quiet you will find that a Pasadena Thrasher has been taking observations, first with one eye and then with the other, and has decided that the new tenant on the ground floor is quite harmless. She comes quite near, hopping on both feet, and rakes the ground deeply with her long sickle-shaped bill, trying to reach through the leaves to the moist earth, where grubs may be found. Always with eye toward the stranger, she circles about at a distance of five or six feet. You can study each feature as well as if she were in your hand. If you go to the same place day after day, she will come to know you, and you may count on a regular visit. Her mate will sit on the top twig of a small evergreen oak near by and pour out his wonderfully rich, varied song, full of the life and joy of the South. Now comes a soft "quit, quit, quit," and an answering twitter of little voices. A Valley Quail, or California Partridge comes tip-toeing out, warily looking to right and left, and followed by a band of well grown youngsters. A neat, trim figure he is, the sun glancing from his sheeny buff breast with its ripple marks of russet. As he steps gingerly along, the plume on his helmet quivers, rising and falling with each change of mood. Now he goes cautiously down to a tiny stream of water to drink. All of his well trained band stand in line behind him, each waiting his turn, instead of all rushing down in a disorderly riot to wet their throats. It is a very pretty sight when the father finally allows them to go down in single file, while he keeps guard, standing on a tiny promontory. The last misses his chance, for a snapping twig gives the alarm and at a word



from the captain they retreat in skirmish order. At times the male is bolder, and will answer defiantly an imitation of his bugle-call, consisting of three shrill notes with the accent on the second.

Now is heard a sharp chirp and looking for some strange bird, we are surprised to see a Chipmunk scamper out into the little glade. He is evidently no less surprised, and after trying for a long time with shrill scolding, to drive away the intruder, retires, still grumbling. The big Gray Squirrel is more confiding and soon becomes accustomed to a friendly presence. He seems to weigh less than nothing as he alights on some frail, bending twig, and almost seems as if he should be classed among the birds, so free are his movements among the tree tops. When he does descend to the ground he seems less at home there than many a bird. As he bounds over the ground his tail floats out with an undulating motion and he seems too light to move easily on solid ground. Like a bit of thistle down blown by a puff of air he floats along.

A scratching sound is heard, then a surly "craw, craw." Evidently it is poor picking, or else the bird is not easily satisfied, for he keeps up a constant grumbling. When he comes out into sight he proves to be a really handsome bird, showily dressed in black and white, with "orange tawny" breast; a bird that one would expect to show off in the tree-tops with orioles and grosbeaks, instead of skulking in the bushes. It is the Spurred Towhee (*Pipilo maculatus megalonyx*), but his fine name and fine feathers are all that there is fine about him. He seems a surly fellow, but perhaps we misinterpret the mood which his harsh notes are meant to express. I have seen him, inspired by fine sunset, climb several twigs high in a shrub, and give voice with evident delight to a sort of trill, varied after a time by being sung in another key. I found this bird far less shy than in Mendocino county and even tamer than the California Brown Towhee, which is so familiar in towns and gardens. The plain Tit-mouse, with his little pointed crest and gray coat, stops on a branch near by to hammer open a seed held skillfully in his claw. Then he catches sight of his feathered love, and an animated chase ensues up and down the branches, in and out, with excited "tzick, a zee zee." A rival joins in the chase, but is finally driven off and our first friend is successful in his suit.

Vigor's Wren, with his hearty, cheerful song, and bustling manner,

is thoroughly at home in these groves and gives you to understand that he is master of the big fallen oak which he has chosen as his castle. Another advantage of a position on the ground is that you can look up through the lace-work of twigs and see clearly any passing visitor from the upper world, clearly outlined against the blue sky. One day, in an hour and a half, I counted one hundred birds which visited the bush under which I was lying. From this it may be judged how dense the bird population is, and yet we are almost unconscious of their presence for the most part. They glide through the air and go through the daily round of their busy life, leaving no trace, injuring nothing, but doing most necessary service. Yet even their songs fall on deaf ears, for most of the visitors to this land, not hearing the songs they are not familiar with, say there are no birds.

ANNA HEAD.

BLACK-THROATED BUNTING.

A. O. U. No. 604.

(*Spiza americana*.)

RANGE.

Central portions of the United States; west to the Rocky Mts., and north to the southern Canadian border. It was formerly found on the Atlantic coast, but is now extremely rare east of the Alleghanies. In winter they migrate south of the U. S.

DESCRIPTION.

Length, 6.75 in.; extent, 11 in.; tail, 2.5 in. Upper parts brownish gray becoming greenish on the crown. Middle of back streaked with black. Yellow line above the eye and another short one below from the base of the bill; breast and below, and edge of wing yellow. Throat white. A black crescent across the breast. Wing coverts rich chestnut. Female with the yellow paler, the black throat patch replaced by a few streaks, and the feathers of the shoulder only edged with chestnut. A remarkably smooth plumaged, and harmoniously colored bird.

HABITS OF THE BLACK-THROATED BUNTING, BY GLEN M. HATHORNE.

A favorite resort of mine in early summer is a large meadow, through which runs a little brook, fed by water from a boggy pond, and on either side of which grow a large number of cat-tails and long marsh grass. The meadow is covered with clover and a variety of wild flowers, with here and there a thistle, raising its head above its fellows as if it were a sentinel on guard against any lurking foes. A little to the north of the pond is a thicket of deciduous shrubs, and further on a heavy oak timber. Taken all together it forms an ideal place for bird life.

While strolling across the meadow one day late in June, I came up-



Photo by G. M. Hathorne.

NEST AND EGGS OF BLACK THROATED BUNTING.

on a nest of the Black-throated Bunting. It was built in a thistle that stood some twenty odd feet from the brook and contained four eggs. The female was nowhere in sight at the time, but the male sat upon an old fence post some distance away, chanting his unmusical notes which can best be expressed by "chink-chink-chee, chee, chee," the first two notes rather slower and pitched somewhat lower than the following. Although I have heard the notes of this Bunting a great many times, every summer since 1895, I always stop and listen when I hear one singing, for it recalls the happy days when I first met them.

During the heated days of June and July when the sun beats directly down upon the earth, the Bunting's ditty will be heard coming from all directions, in a locality where they are abundant, and when all other songsters are silent. Upon approaching the nest in question, the female appeared and began to scold and flutter at my intrusion. Not so her mate; he sat as calmly as ever and continued his serenading all the time I was photographing the nest.

From the first of May fresh eggs may be found, but they are more abundant during the second and third weeks. The nest is composed of coarse grass and sometimes roots and corn husks on the exterior, and lined with finer grass, weeds, stems and hair. It may be found in a variety of places, but is most always near the ground. The eggs, which are blue-green in color, number from three to five as a complement, and two broods are often raised in a season.

Identification Chart No. 15.

No. 536. Lapland Longspur (*Calcarius lapponicus*).

Breeds in the northern parts of N. A., migrating in winter to the northern border of the U. S. and rarely to the middle portions, except in the interior where they are fairly abundant. Length 6 in. Black crown, separated from the black of the sides of head and throat by a whitish superciliary stripe. Chestnut color on the back of neck. Rest of upper parts streaked with black and buffy. In winter the black and chestnut is nearly concealed by the buffy tips to the feathers. Female. Black on head concealed by gray and that on throat broken. Chestnut color almost concealed.

No. 553. Harris Sparrow, (*Zonotrichia querula*).

Middle portions of the United States from Illinois west to middle Kansas, and from Manitoba south to Texas. Whole crown, throat and face black; sides of head grayish. Upper parts streaked with black, brownish and buffy. In winter the black on the crown is concealed by grayish and the throat is white, bordered with dusky streaks, and a rusty patch adorns the breast. In the female the hood is imperfect and intermingled with white. Length 7.5 in.

No. 565. Black-chinned Sparrow, (*Spizella atrigularis*).

Southern California, Arizona and New Mexico. Length, 6 in. Face and throat, black. A reddish brown patch in the middle of the back. Rest of plumage dark ash shading into whitish on the belly. The female is slightly duller in color. The young lack the black mask and the reddish brown on the back is paler. It has an extremely long tail for its slender body.

English Sparrow, (*Passer domesticus*).

An introduced species, but now covering the whole of the United States and nearly all of Canada; frequenting the cities and towns, where they are familiar objects on the streets. Very pugnacious and make war on all the smaller native birds. Length, 6 in. Face and throat black. Hind neck chestnut. Rest of upper parts grayish, streaked with black and brown. Tail grayish. Under parts a dirty white. Female dull brownish gray on the upper parts and streaked with black and brown. Entire under parts grayish brown with no black on the face or throat. No brown on the back of neck. Young males like the female and with a small patch of blackish on the chin.



536.



536.

Winter



553.



565.



C. A. REED



RED-BREASTED NUTHATCH.

The fourth member of the *Sittinæ* sub-family in America is the pigmy nuthatch, known scientifically as *Sitta pygmæa*, a genuine westerner, not known east of the plains. However, in the Rocky Mountain district he is an abundant species, his range east and west being from the plains to the Pacific coast and north and south from the Canadian boundary to the mountains of Mexico. Swinging and gliding about among the pines, performing the same antics as his eastern kinsmen, he utters a cheery whistle, that may be translated, "whit, whit, whit." His movements are often so rapid that he is difficult to follow with the eye as he flits from one tree to another or dashes amid the branches. He scarcely remains quiet long enough for you to note his markings and settle his identity, but once you are sure of him, you will never mistake him for another bird.

In Colorado there is little of a migratory movement even up and down the mountains among these interesting birdlets. In the winter a few descend from the heights and dwell on the plains, where the weather is not so rigorous. On the approach of spring they again hie up into the mountains, spending the summer there and rearing their pretty bairns. However, the majority of them remain in the mountains all winter, braving the bitterest and fiercest storms often at an altitude of 8,000 feet. Their breeding range is from 6,000 to 10,000 feet, the latter elevation being only a little below timber line.

Spite of his unique and interesting habits, the poets have scarcely begun to chant the praises of the American nuthatch. One of the best tributes I have been able to find is from the pen of Edith Thomas, who apostrophizes our bird in this way:

"Shrewd little haunter of woods all gray,
Whom I meet on my walk of a winter day,
You're busy inspecting each cranny and hole
In the ragged bark of yon hickory bole;
You intent on your task, and I on the law
Of your wonderful head and gymnastic claw!
The woodpecker well may despair of this feat—
Only the fly with you can compete!
So much is clear; but I fain would know
How you can so reckless and fearless go.
Head upward, head downward, all one to you,
Zenith and nadir the same to your view."

We have now described the American nuthatch quartette, and will turn to other fields no less inviting, albeit more remote. The nuthatch of central Europe, scientifically known as *Sitta cæsia*, is closely related

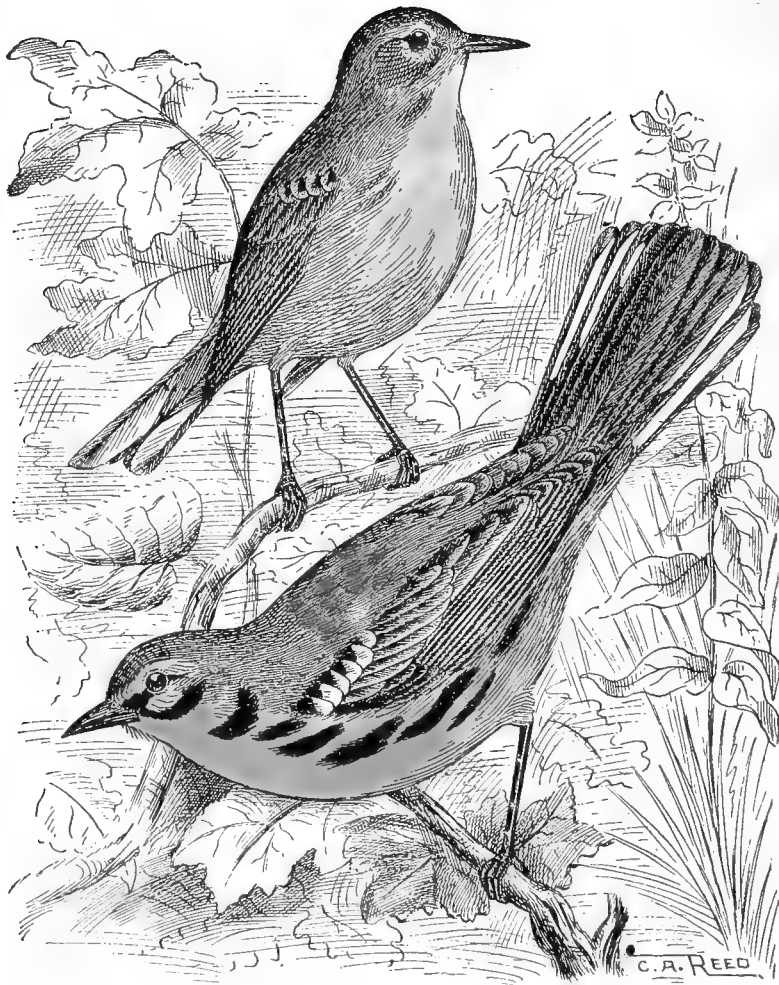


YOUNG PRAIRIE WARBLER.

HABITS.

ABOUT ten years ago, Prairie Warblers were very common in suitable places about Worcester. From then on they have gradually disappeared and for nearly ten years I know of no record of their having been seen. Two years ago, three pairs nested in a small hollow covered with scrub oaks, chestnuts and barberry bushes. Last year there were at least a dozen pairs there. Why they ever left is a mystery; as far as we know, nothing was ever done to disturb them in any way, and nothing occurred to induce them to return again; yet here they are and they will always find a welcome as long as they care to remain. Like the other members of the warbler family, they are not blessed with musical voices to correspond with their beautiful dress, but their sharp, jerky song has a business like air about it that commands attention. They seem to be very nervous and restless at all times, and rarely stay in one place more than a few minutes at a time, except perhaps during the nesting time, when the male is perched upon an outer dead branch of a pine tree, within sight of his home, and continually gives voice to his peculiar little song.

Although many pairs of these sprightly little birds may nest within a comparatively small area, each seems to have his own section and look-out tree, and many an exciting chase occurs when the head of one household encroaches on the domains of another; a flash of yellow is all that can be seen of the bewildering conflicts as they dash in and out among the underbrush, each one finally going to his own perch and crowing or rather chirping his victory. These petty warfares are all forgotten when any danger from an outside source threatens the home of any one of them. Then the whole colony appears as if by magic and joins in their common protest against the trespasser. Their nests are quite difficult to find as they are almost without exception built at the top of a low shrub, just at the point where the leaves cluster thickest, and as there are hundreds of shrubs that are just suited to their needs, and the nest can only be found by inspecting the tops of each individual bush, unless the female can be surprised, a feat that is not often accomplished.



PRAIRIE WARBLERS (MALE AND FEMALE).

No. 249. Marbled Godwit, (*Limosa fedoa.*)

The interior of North America, breeding from the middle portions of the U. S. northwards to Manitoba., and wintering south of the United States. Length very variable, but averaging about 20 in. General color above and below, a rufous buff; back heavily barred with black; sides less heavily barred with the same. One of the largest of the plover family.

No. 250. Pacific Godwit, (*Limosa lapponica baueri.*)

Found on the Alaskan coast of the Pacific. Averaging slightly less in length than the preceding. Upper parts not so heavily barred. Rump white. Most of the primaries black. Sides only slightly barred. Under and upper parts a stronger tinge of rusty than the preceding. In winter, grayish brown above, the feathers having black centers. Below white.

No. 251. Hudsonian Godwit (*Limosa haemastica.*)

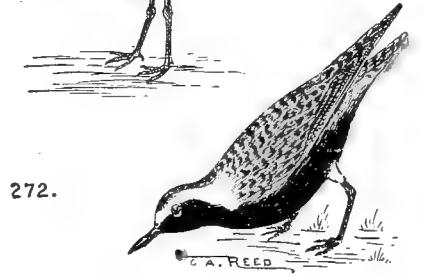
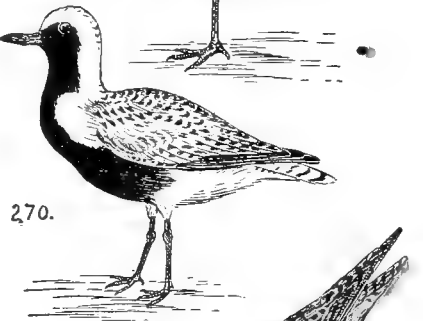
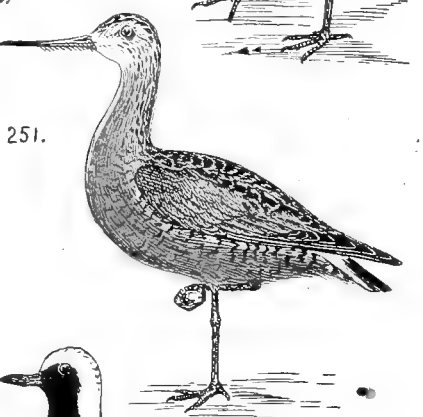
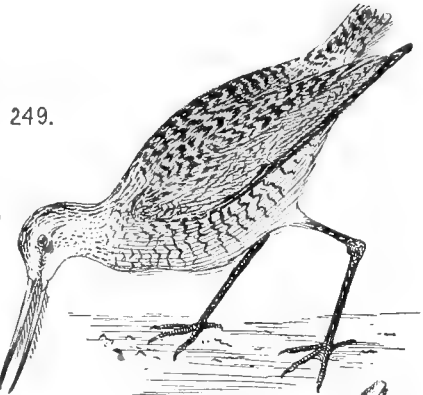
Eastern North America, breeding in the far north and migrating to South America. Length about 16 in. Under parts bright chestnut, irregularly barred with black. Upper parts blackish, and the feathers edged with rufous or buffy. Rump blackish; upper tail coverts, and bases of the black tail feathers, white. Primaries blackish, with white shafts. In winter the upper parts are dark ash with some white edges to the feathers. Under parts whitish, more or less tinged with rusty and with the barring faintly indicated.

No. 270. Black-bellied Plover, (*Charadrius squatarola.*)

Whole of North America, breeding in the northern parts and migrating to South America. Length 12 in. Feathers of the back and wings varied with black and grayish white. Whole top of head and back of neck white, with only a few grayish feathers on the back of head. Whole face, throat, and breast black. Belly white. Tail white, barred with black. In winter, upper parts similar, and under parts nearly all white.

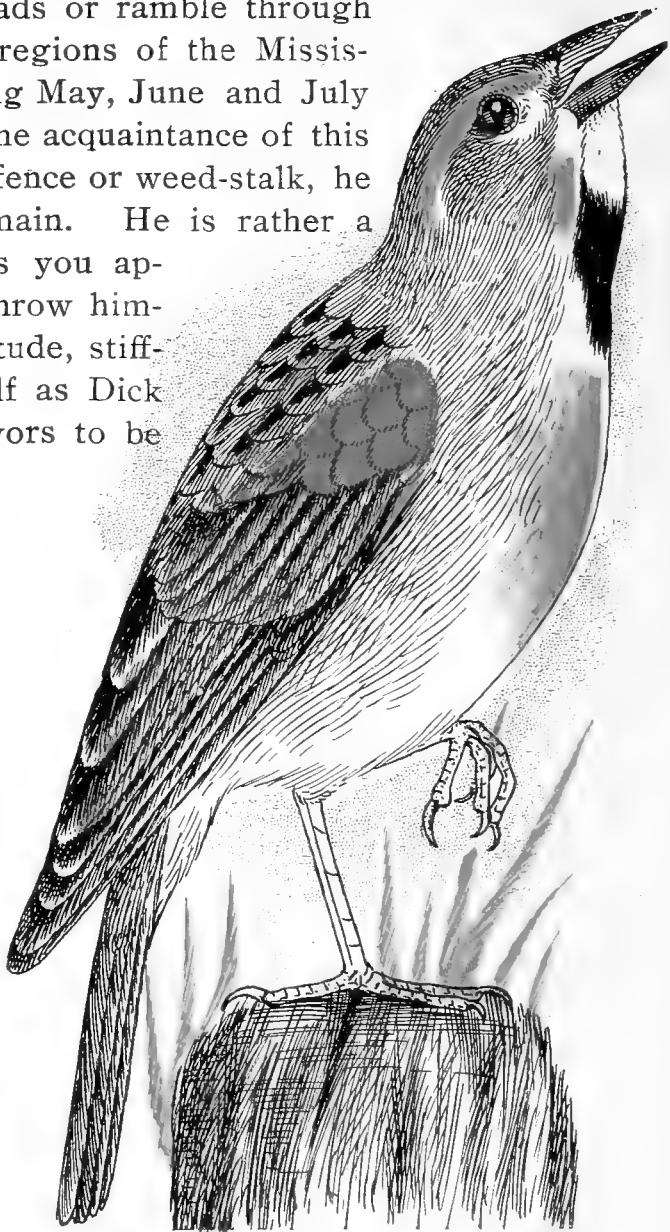
No. 272. Golden Plover. (*Charadrius dominicus.*)

Whole of North America, breeding in the extreme north and migrating to South America in winter. Length, 11 in. Upper parts black, barred or specked with golden yellow and whitish. Forehead and stripe over the eye white. Face, throat, sides of head, and entire under parts except the under tail coverts, black. Linings of wings and axillars grayish, whereas in the preceding they are always black. In winter the upper parts are duller and the under, grayish white, faintly streaked with dusky.



THE BIRD WITH THE STAMMERING TONGUE.

Drive along the country roads or ramble through the fields of the agricultural regions of the Mississippi Valley at any time during May, June and July and you cannot fail to make the acquaintance of this songster. From hedge-row, fence or weed-stalk, he will welcome you into his domain. He is rather a trustful little fellow, and as you approach he will look at you, throw himself into his conventional attitude, stiffly erect, and introduce himself as Dick Cissel. In his frantic endeavors to be cordial, he goes through the ceremony of introduction too rapidly for clear enunciation; his speech becomes faltering and he stammers forth his name, "Dick - Dick - Cissel, "Dick-Cis-Cissel. Dick-Dick-Cis-Cissel." Sometimes he utters "Dick Cissel" without a halt and, perhaps, if the old adage, "Practice makes perfect," holds good, Dick may yet overcome the impediment in his delivery—who knows? The Dickcissel (*Spiza americana*) is indeed an incessant songster during the breeding season. He is an early riser and from dawn



BLACK-THROATED BUNTING.

till close of day his notes are wafted across the meadows; the noonday sun that hushes most bird voices has no effect on him, for perched along the dusty road-side he repeats his simple strain under its hottest rays, and his metallic voice sometimes breaks the stillness of the night, as he wakes from startled dreams to tell his name. Although his song is unmusical and monotonous to human ears, no doubt to his little mate upon her nest, tucked away near by, it sounds sweeter than the voice of the thrush. The Dickcissel belongs to the great finch family and is a bird of the prairies and loves the hay-fields and the grassy pastures. He is the constant companion in the summer of the Meadow Lark and resembles him in general coloring, which accounts for his

misleading common name of Little Meadow Lark or Little Field Lark.

The black crescent on his throat has given him the more appropriate title of Black-throated Bunting. The nest is always placed on or near the ground, among the clover, in the grass and weeds, and in low bushes. It is composed of weed-stems, rootlets and grasses and lined with finer grasses and horse hair. The four or five eggs are of a light blue color.

Dickcissels subsist on a mixed diet of vegetable and animal matter. The food of the adult birds consists of grass seed and insects, and the young birds are fed exclusively on insects. They are the inveterate enemy of the grasshopper, which makes them of economic importance in relation to agriculture. These birds are common summer residents in the Central U. S., from the Allegheny Mountains to the Great Plains. Formerly they bred in the Eastern States, but now only rarely. They winter in Tropical regions beyond our southern boundary.

A. L. BOOKER.

APRIL BIRDS.

(In Pennsylvania.)

The pleasures of a beautiful April morning with the birds! Cold days are now practically over; and instead of the almost empty woods of midwinter we find every bit of forest filled with our friends of last year. Simultaneously, too, with the sprouting of the buds of trees and the blossoming of the hepatica in the woods we find that bird life begins to abound.

Early in the month last year, I made a trip to a varied tract of land, where were deciduous woods, large tracts of hemlocks, and an open valley with a swollen stream rushing through. Several smaller valleys opened into it, and along the road were rolling uplands and orchards. In one of these valleys, with a large field well covered with old corn stalks, a flock of Grackles were filling the air with their creaking notes; and this reminds me of a friend of mine who, referring to the song of the Grackle, says it sounds like the water running from a spigot, which was suddenly turned off; and though homely, this simile seems to me accurate.

A dash of blue!—the familiar and beloved Bluebird. He merely crossed my path as if to greet me, and then from an apple tree close by came his tender, melodious “purity-purity-purity.” Next my attention was attracted by a number of small grayish-olive birds. I was walking along when I suddenly came upon them, evidently in fierce discussion, in a wild grape tangle. One was turned quite upside down, hanging on a branch, with his pretty red cap showing conspicuously. In an

instant, when he saw me, his red cap vanished, and the party dispersed. It is a curious thing how seldom the Ruby-crowned Kinglet will show his red patch; usually the olive feathers cover it. Then I heard one of the most marvelous of bird songs, and not until I had discovered the singer, a plain Ruby-crown, did I believe him capable of such a surpassingly sweet, and yet loud, song. With the Ruby-crowns were a number of Tufted Titmice. I heard their usual notes, "day-day-day-day," much like the chickadees, but louder and somewhat nasal. Occasionally one would recall his whistled "pets-pets," which indeed, to one who knows and loves the chickadee, is more suiting to the Tufted Tit than his bad imitation. Another call from the woods attracted my attention, a slight lisping note. Doubtful of its owner, I hunted him up and soon came upon a party of Cedarbirds. As I looked at the big brown fellows, with their crests and dots of red, they seemed to me exceedingly handsome and dignified. While walking on, I heard a hoarse "caw-caw," and looking up saw a Crow circling about. He seemed interested, and I tried to communicate with him by an answering "caw," then I sat down on a stump, and answered him again. His curiosity got the better of him for once, for he circled lower and lower, and finally lit on a branch of the tall tree underneath which I sat. The conversation was kept up, but he made no further advances. Soon another crow happened along, and with a parting "caw" the one in the tree joined him. Away they went, with their beautiful glossy black wings showing against the azure sky. I could not help wondering how such a body was fed throughout the long, cold winter when the ground was frozen, or when a few inches of snow covered the earth.

"Tap-tap-tap," and then a sharp "peek"—I looked up and saw a Hairy Woodpecker. He did not seem disturbed by my presence; on the contrary, he went on tapping the branches most unconcernedly. I watched him for awhile, when I was rather startled by the whirr-r of a Flicker that suddenly flew from a clear spot inside a fence, showing to advantage his golden wings and white rump. Walking to the place whence he had flown, I found a rather disturbed ant-hill—Sir Flicker had been making a quiet breakfast on a swarm of black ants.

In a wooded dale with a small stream flowing down the slope over the rocks, I saw a pair of Cardinals—the male, with his brilliant red body, wings and crest, and the female, with her olive-brown body with sparsely distributed red. They were in a low bush when I discovered them, but in a moment, with a sharp "tsip" they had made a circuit and reached the high branches of a tree near by. Then I heard the song—a beautiful loud, rich whistle, suggestive of the bluebird's but louder and clearer.

Near this spot I came upon a White-breasted Nuthatch, who with a persistent "yank, yank," mounted a slender trunk, deeply interested in examining the bark. Suddenly he stopped, looked at me in a calm, inquiring way and apparently satisfied, unconcernedly recommenced his climbing, up, up, then he stopped for a longer time than usual, no doubt to extract some larvae or insects eggs. I need only mention a few of the other birds I saw that day; there were juncos, winter wrens, brown creepers, chipping, vesper, tree, and song sparrows. Towhees I found in large numbers, and their familiar calls filled the woods. In a damp, wooded valley with a mossy stream flowing through it, I saw a Louisiana Water Thrush, and heard his wild woodland song, that seemed so perfectly to harmonize with the surroundings.

Later in the month, when the weather is more settled and insects begin to abound, more insectivorous birds are to be seen. The Red-eyed Vireos arrive in time to defend the tender leaves and buds. The Swallows—Barn, Bank, and White-bellied come in great numbers and put a check on the flying insects and a few warblers put in their appearance, notably the Black-throated Blue, Pine, Black and White, and the Redstart

NORMAN O. FOERSTER

SNOW BIRD'S SONG.

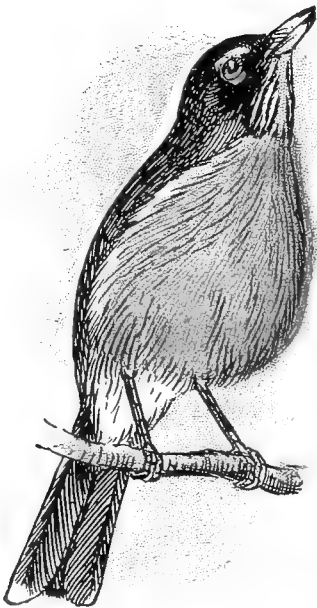
It was a beautiful day in February, and while the ground was covered with snow and ice to the depth of several inches, yet the weather was mild and all the bird residents were active and enjoying the bright sunshine. While passing through a wood, I came upon a small flock of Juncos. On near approach most of them flew away; one fat little fellow, however, remained perched in a low bush where he received the full benefit of the warm sun. Presently a series of sweet warbling notes fell upon my ear and I looked all around to see from whence they came, but I could discover no bird near. On watching my little Junco more closely I found that he was responsible for the music. I plainly saw his little bosom rise and fall as he gave vent to some of the loveliest bird notes I have had the pleasure of hearing. The notes were low and subdued, yet there was a sweetness and charm about them that would captivate any bird lover. I can only compare the song with the first low notes of the Goldfinch or our domestic Canary. The Song Sparrows were also singing joyously in the meadows, and a Downy Woodpecker was hammering away in the top of a dead tree in the woods; it seemed as though these little feathered people were conscious that Spring was again approaching and that they would soon be joined by their southern comrades.

BERTON MERCER.

SPRING'S OPENING DAY.

FRANCES PERHAM CARSON.

"Awake, awake, ye sleepy heads,
 Awake, and from your garden beds
 Your winter coverings quickly fling,"
 So Robin Red began to sing.
 "Up, up, and robe in bright array,
 To celebrate Spring's Opening Day,
 For I am herald sent to say
 That Spring, sweet Spring is on her way."



Soon from a neighb'ring flower bed
 A jaunty Tulip raised her head,
 And, smiling up at Robin Red,
 "I'm glad you told me, sir," she said;
 "And pray be sure you don't forget
 To wake the blue-eyed Violet,
 In arms of Mother Earth, the pet,
 I think she must be slumb'ring yet."
 "Nay, nay, not so," a sweet voice said,
 Not far from Tulip's tumbled bed;
 "Dear Tulip, you are tall and bright,
 And naught can keep you out of sight,
 While I, so low, can hide from view
 My garb of green and eyes of blue,
 And ere you had unclosed your eyes,
 Mine had been lifted to the skies."

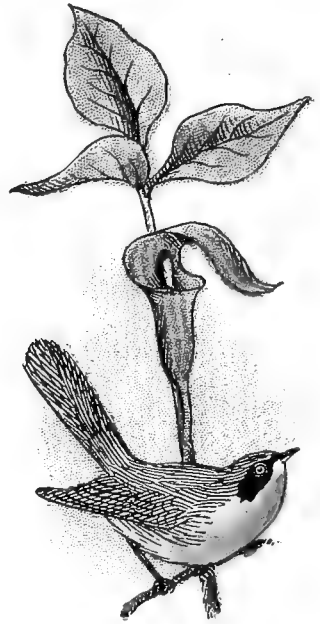
"Hark!" said the pink-eyed Perwinkle,
 "Methought I heard a sleigh bell tinkle."
 "Ho!" laughed the Crocus, "Don't you know
 That sleighbells only come with snow?
 The diff'rence you can surely tell
 'Tween flowret's notes and shrill sleigh bell;
 The tiny Blue Bells always ring
 To welcome the first day of Spring."

Down in a shady, sheltered spot,
 There slept a sweet Forget-me-not,
 Who opened wide her starry eyes,
 Looked up and smiled in sweet surprise,
 And said: "Ah, it has been so long
 Since I have heard the Robin's song,
 I yet can hardly make it seem
 Of Springtime but a Winter's dream."

“I woke ere Winter took his flight,”
 So lisped Spring Beauty, pink and white,
 “The snow was yet upon the ground
 And most of you were sleeping sound.
 To raise my head I made so bold
 And found 'twas not so very cold,
 And, when the sunbeams with me played,
 My cheeks grew pink and so I stayed.”

Peeped through the earth the Maidenhair,
 Her locks wound round her stems with care.
 A drop of rain her hair unfurled,
 And all her green locks were uncurled.
 A zephyr, too, with soft caress,
 Tossed to and fro each waving tress,
 The Maiden Fern seemed not to care
 That all the curl had left her hair.

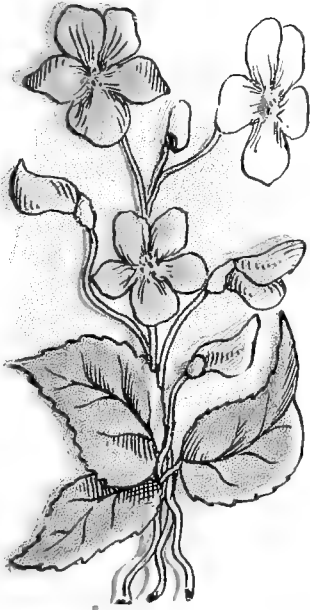
From bough to bough hopped Robin Red,
 From tree to tree the news he spread,
 Until it seemed as if each note
 Would split his tiny, swelling throat.
 Chirped he: “What if I do grow hoarse,
 The flowers must be waked of course;
 But now as they are waked and dressed,
 In yonder tree I'll perch and rest.”



Jack-in-the-pulpit rose and said,
 “A vote of thanks to Robin Red,
 According to my mind, is due;
 Will some one kindly take the cue?”
 “I move,” the Pussy-willow purred,
 “A vote of thanks to this young bird
 For singing such a cheery lay,
 Awakening us to Spring's first day.”

“I second that with right good will,”
 Responded bright-eyed Daffodil;
 Said Chairman Jack, “The vote we'll take,
 All those opposed their heads will shake
 While those agreed their heads will nod
 Until they touch the garden sod.”
 Then all the flowers in their beds
 Carried the vote by nodding heads.

Quick from his perch the Robin flew
 Right down where all the flowers grew,
 And to one side he cocked his head,
 While in a song these words he said:
 "Thanks to you all, my flowrets sweet,
 It gives me joy your blooms to greet,
 For well I know you've done your best,
 Else had you not so quickly dressed.



"But this one word I'd leave with you,
 Let us give thanks where thanks are due.
 To Him who gave me voice to sing
 And made me herald of the Spring,
 Who bade the sunbeams melt the snow
 And warm the air that you might grow,
 To Him alone give thanks and praise,
 He made us all and times our days.

"A sweet good bye I now must sing,
 'Tis late, I must be on the wing;
 I promised Mrs. Robin Red
 That soon as you were out of bed
 I'd go with her and do my best
 To find a nook and build our nest.
 Good bye, good bye, from yonder tree
 I hear her sweet voice calling me."

Away to make his promise true,
 With wide spread wings the Robin flew,
 And all the flowers faced the light
 And watched the bird fly out of sight.
 From bloom to bloom the sunbeams passed
 And asked what made them grow so fast.
 For every leaf and bud and flower
 Grew, both in sunshine and in shower.

With smile and nod the Jonquil said,
 "Ere Jack Frost tucks us into bed,
 We've work to do our growth to reach
 To fill the place assigned to each,
 And that is why we grow so fast,
 So, when we sink to sleep at last,
 Sweet dreams we'll have of joyous Spring,
 When Robins come and Blue Bells ring."

LOGGERHEAD SHRIKE.

Perched upon the topmost twig of an osage-orange tree, his gray and rounded form silhouetted against the leaden March sky, we see the first Loggerhead of the season. He is one of the earlier spring arrivals, being preceded only by the Bluebird, Grackle, Robin and Song Sparrow.

Totally ignoring the bleak north winds, and the gloomy threatening clouds, he sounds his call notes right merrily. This is his early spring song and how different it is from his harsh and discordant notes of the previous autumn. His bell-like calls are now far from unpleasant to our ears and we rejoice at the vocal improvement he has made. Since he left us upon the beginning of winter, we have formed an acquaintance with his cousin, the Great Northern Shrike, who has travelled far from the land of the "Aurora borealis" to spend the more severe part of the winter with us.

Cousin "borealis" is an accomplished songster—a veritable mocking bird of the northland, and although we conceded him the palm upon the first hearing, we are none the less proud of our own Loggerhead for the two clear sweet notes he is capable of producing. The Loggerhead arrives about the middle of March, the males preceding the females a few days only.

So closely does Mrs. Loggerhead follow that I have wondered why they do not journey together. When finally at home, which is generally in the vicinity of the previous season's domicile, no time is lost in beginning the new nest. Great energy is at first displayed, but later considerable dallying is noticed and often two or three weeks are required to finish their new home. It is a worthy structure, however, in its finished state, and, like the scriptural house that was founded upon a rock, is able to withstand the March winds that come and the April floods that are sure to descend upon it. The foundations are of sticks and thorny twigs laced and interlaced with rootlets, grasses and strings. The deep and beautifully rounded inner nest is thickly and softly lined with the fur of small animals or feathers. The waving feathers give it the appearance of warmth and comfort and it certainly proves an attractive and well loved place, for its owners are seldom found at any great distance from it.

A ride along our country roads during the first week in April will disclose many shrike nests in the process of construction. They are easily observed at this season, for it is a full month before the leafing of the hedges, and this renders them very conspicuous. This fact is in marked contrast with the nesting habits of birds in general, the great majority of which depends upon dense foliage or protective coloration to hide their treasures from curious eyes.



Photo from life by Isaac E. Hess
LOGGERHEAD SHRIKE (Male.)

Except in occasional instances, however, the conspicuity of the Loggerheads nest does not prove detrimental to its safety, for only by extremely hard labor and an absolute indifference to thorns, can one and its contents be examined. The nests are placed in the thorniest and most impenetrable parts of the hedge-rows and usually just out of reach from the ground. From the observations of several years during which hundreds of Shrikes nests were examined, I would estimate that a line drawn horizontally, seven feet six inches from the ground would pass through a majority of them, while perhaps ninety per cent. would be found between two parallel lines six and a half and eight feet up. This is certainly a noteworthy characteristic of his habits and no doubt represents the acumen of generations of Shrike experiences. A foot or more higher, and the cosily lined home would be buffeted about by the fierce spring winds which would often prove disastrous.

A foot or so lower would bring them within the limits of the curiosity and mercy of the country school lad, the former trait of whom is unlimited and the latter seldom demonstrated. Far too often do we see a nest turned on its side with a corn stalk thrust through the center and the pretty speckled eggs lying scattered and broken upon the ground. Short legs and shorter arms are unable to reach the prize and their owner, with the selfishness of human nature displayed in its embryonic state, destroys that which he cannot possess. Our Loggerhead is not discouraged however with occasional reverses, but will immediately proceed to build him a new home, and a fortnight later will be happily esconced in his new possessions.

It is here we may see him to our best advantage, for he is strictly a home-bird, and will not object to a much closer inspection of his home-life than is allowed by most of our studies in the bird kingdom.

His personal appearance is one of innocence and meekness and does not in the least betray that cruel hidden nature that so often shows itself in undeniable a manner. While Mother Nature decreed that he should prey upon the field mouse and other destructive rodents, and gave him a hooked beak that he might better handle his provinder, we find it hard to forgive his cannibalistic tendencies when we discover a little song-bird impaled upon the cruel thorns. We are more willing however to forget his faults when we see the love and attention he bestows upon his little mate and the unselfish care he devotes to his family of little ones.

This remarkable devotion is exhibited from the day the young are hatched until they vie with him in size and plumage. It is the male we see in the accompanying photograph, which has braved the terrible glass eye of the camera in order to feed his hungry children. In the



Photo from life by I. E. Hess.

second plate he has induced Mrs. Loggerhead to defy all danger and return to the little ones. He sits by her side however ready to protect her from any peril.

The male proves an admirable character in his home-life. He helps to build the home and is a constant companion of his mate during incubation. He brings her food while she is setting or temporarily relieves her of the task. He helps in feeding and rearing the young and taken all together is a model and exemplary husband whose virtues far outnumber and exceed his faults. The number of eggs deposited and constituting a set is usually six, although sets of five and seven are occasionally found. So persistent are the Loggerheads in the determination to rear a family that third and fourth nests will be built and full sets deposited, if their previous efforts have proved unavailing. So attached does a pair become to a certain locality that, should their favorite hedge-rows be uprooted and their nesting sites thereby destroyed, they will often be found to change their fixed ideas regarding sites, and build in orchard trees rather than leave the vicinity.

ISAAC E. HESS, Philo, Ills.



Address communications for this department to
 MEG MERRYTHOUGHT, 156 Waterville Street,
 Waterbury, Ct.

MY DEAR YOUNG FOLKS:

This month's vanguard of May's merry army of birds will coax you to spend every spare moment in the greening fields and moist woods to welcome each new-comer from its Southern home. Our little friends who meet in this corner each month are so scattered over our broad country that the time of the coming of the birds varies greatly; but we of Connecticut have already welcomed the bluebird, the purple finch, the phoebe, and the song and fox sparrows, and during April shall keep a sharp lookout for the chipping, field, swamp, and white-throated sparrows, the hermit thrush, martin, swallows, chebec, towhee, the vireos, brown thrasher, and a few of the warblers.

As most of the birds migrate at night, you may be surprised any morning to find flocks where the afternoon before there was not a bird to be seen.

This is a good month to listen to solos and to become familiar with some of the bird songs. Let me urge you to take blank book and pencil with you on your trips afield, and take Capt. Cuttle's advice, "when found, make a note of." It is not safe to trust to memory, but jot down at once the birds seen, their size, shape, color, actions, flight, song, etc., you will find it a help in learning the birds and for comparison in other years. One of our readers asks if the European Goldfinches which are now naturalized in Central Park, New York, migrate to the south in the Fall. Many—perhaps all—of them are permanent residents. They were introduced from Europe into this country (near Boston and New York) twenty-five years ago, and are sometimes found in the company of their American cousins.

We again ask our little friends to be patient if they do not receive replies to their queries at once. The names which appear on the Roll of Honor this month, are those who sent answers to the *February* puzzles, and the names of those who solve the puzzles in this number will

not be printed until the June number. Some of you were puzzled by a misprint in the February enigma—meadow-larks, in which the figure 9 was omitted, and instead of stormy petrel, a variety of answers was given, which is not to be wondered at, as several species have similar habits. We have received several enigmas this month, besides many interesting accounts of birding adventures, so you know why some of you will have to wait till another time to see your contribution in our pages.

Cordially yours,

MEG MERRYTHOUGHT.

ANSWERS TO MARCH PUZZLES.

Enigma. Wood-thrushes.

What are their names? No. 1. Dick-cissel. No. 2. Immature orchard oriole in its second year. In common with many other birds, this oriole requires three years to perfect its plumage. The first year it is like the female, the second year adds the black throat, and occasional splashes of chestnut underneath, the third year it dons the perfect plumage of the male. No. 3. The description is not minute enough to positively identify this bird. It probably was the Redpoll.

ROLL OF HONOR.

Jacob R. VanDyke, Marshall, Mo. Mary A. Johnson, Kansas City, Mo. Marietta Washburn, Goodwin, S. D. Clair McMorrان, Spokane, Wash. Leroy B. Noble, Cromwell, Conn. Wm. Schneider, LaCrosse, Wis. Isidor Reh fuss, LaCrosse, Wis. Pearl Wampler, Dayton, Va. Louise Jordan. Defiance, Ohio. Raymond Hill, Uxbridge, Mass. Carl E. Geigenheimer, Taunton, Mass. W. Paul Pimm, Carbon Black, Pa. Everett P. Walton, New Vineyard. Me. Lillian M. Weeks, Marietta, O. Stafford Francis, Exeter, N. H. Gerald B. Thomas, Livermore, Ia. Lewis S. Gannet, Rochester, N. Y.

EXTRACTS FROM OUR MAIL BAG.

I have been taking the A. O. for over a year and am very much delighted with it. It is a great help in studying birds. On one ramble on July 4th, 1901, a friend and myself were going through the timber, when my companion noticed a nest in an elm tree, from which flew a small black and yellow bird. The nest was very small, built out on the limb and there were three eggs in it. We thought that the eggs were those of a Western yellow-throated warbler, as the bird somewhat resembled a picture of that bird, but since I have learned that it was a Redstart's nest and eggs. In the latter part of April, 1902 three of us were in the forest, and were nearing a Red-tailed Hawk's nest which we had found the year before. This nest was very high up in a black ash, and as we came closer, up flew the hawk. I was the only one who

wanted to climb it. I had climbed it the year before, and had found a nest of little fuzzy chicken hawks. So I started up the perpendicular trunk (devoid of branches until near the top,) and with the help of a friendly grapevine, managed to ascend to the bulky structure. This was lined with fine roots and some of the sticks in it were quite large. I found three eggs, about the size of a hen's, and bluish white with large blotches of brown. We could hear the hawks off in the timber, making a shrill, loud noise as if calling for help, but what bird would like to help a hawk, unless it would be another hawk?

We found several little blue herons nests in a wild plum thicket. The nests were close to the ground, but exceedingly difficult to reach on account of the thorns. They are light structures, the eggs being visible from the ground, through many cracks between the sticks. The little blue heron is truly a beautiful bird, though its legs are very long, also its neck. The largest bird I know of about here is the Great Blue Heron. I generally put up boxes for the wrens, but the martins have never yet decided to build in them, probably on account of their being so low. On these cold mornings the chickadees, nuthatches, downy and hairy woodpeckers delight in a piece of suet.

PAUL RAVLIN, LaPorte City, Ia.

One day in May while plowing corn, I repeatedly saw a shrike (in this locality called a mouse hawk) driving, or rather chasing some purple grackles. The shrike seemed to have a certain portion of the field surrounding a small thicket (probably in which his nest was situated) for his feeding ground. There were three grackles hunting grubs for their young (which were in an orchard about a quarter of a mile distant) who would persist in returning to the shrikes portion of the field. The grackles were continually on the watch out for the shrike. He (the shrike) used a large tree near by for his look-out, and all at once without warning he would dart out and skim along the ground, almost touching the earth with his wings as he flew, The grackles would hardly ever see him until he was right upon them, and their large yellow eyes would fairly bulge out with terror as they flew swiftly away, only to repeat the same performance much to the annoyance of the shrike. I have also seen the shrikes when looking for their prey, either insects or mice, hover in the air after the manner of small hawks till at length they dart down, secure their prey, and fly away to some neighboring tree to eat it.

I have also seen this fall several small thorn trees on which were at least a dozen large grasshoppers impaled upon the thorns, which I suppose was the work of the shrikes.

PERCY I. PHILLIPS, Belleville, Ills.

We have got a parrot and a canary, and one day we put the canary in the parrot's cage to see what the parrot would do. The parrot looked at the canary for a minute and said "Hello, parrot," and walked off. I have got quite a lot of stuffed birds, and one day the parrot thought he would find out what they were made of, and almost spoiled a cedar waxwing and a sora rail, but I repaired them. One morning early last summer we went out looking for squirrels nests, and came to an old orchard, and my brother climbed an old apple tree and looked into a hole. He hollered to the rest that he had found a red squirrel's nest. He reached into the hole to take out the squirrel and pulled out a screech owl. There were two owls in the nest, and when we took out the owls we noticed some cotton in the nest, and my brother said it was funny that cotton should be in there, so he took some of it out, and the cotton was, five young owls. We took the owls home and thought we could tame the young ones, but we had such a large cage for them that it was almost as if they were free. I read a story of one young owl called Clawem, and I guessed that the name would fit our owls, as they can clawem.

CARL E. GEGENHEIMER,
Taunton, Mass.

A year or two ago when the river was mostly covered with ice, a red headed duck flew down to a little open place in the river, and began to swim about. A number of boys immediately collected and running out on the ice until they were about twenty feet from the duck, began to throw stones at him. He went on diving and swimming as if nobody was near. Once in a while one of the stones would hit him, but he took no notice of them. I suppose he wanted to stay in the open water, at least, I never saw a duck sit in the water and let boys throw rocks at him. For I have tried to creep up on ducks and have had them go flying away when I was a sixteenth of a mile away. At last a big rock landed near him and he flew off. In crossing over the road he struck a telephone wire with his wing and almost fell to the ground. He alighted in some open water further up the river. One of the boys went home and got his air rifle. He hit the duck two or three times before it flew back to where it came from. The boy's father came down to the river with his gun and fired twice at the duck. He knocked out a few feathers, but the bullets were not large enough. We went up the river the next day, and there was the duck swimming contentedly around. If the next day hadn't been Sunday, probably the man would have shot the duck. On Monday the duck was gone, and I suppose is now swimming in some pool if somebody hasn't shot him.

STAFFORD FRANCIS, Exeter, N. H.

NUMERICAL ENIGMA.

I am a beautiful bird and composed of fourteen letters. My 12, 14, 6, 13, 10 is what nature robes the earth with once a year. My 1, 7, 4, 11, 10, 12, 13, 4 is what I am on the Dakota prairies. My 10, 6, 1, 7 is what holds my tiny treasures. I fear the 2, 9, 8, as he killed my mate. Every day I look for 5, 3, 14, 12, 6, worms.

MARIETTA WASHBURN, Goodwin, S. D.

Enigma No. 2.

My first is in great but not in small,
 My second in race but not in ball,
 My third you will find in the word man,
 While my next is found in the short word can.
 My fifth and seventh are hid in kite,
 While my sixth is in the word delight.
 There's letters seven in my name
 Mr. Sparrow and mine are just the same.
 Now can everyone guess my name aright?
 For I am a bird as black as night.

MARIETTA WASHBURN.

A Spring Enigma.

I am composed of 13 letters, forming the names of two birds. The 1st is from 1 to 8 and the 2nd from 9 to 13. My 7, 10, 1, 5, 4, 9, is found in every city. My 9, 10, 5, 4, is an article of dress. My 11, 6, 13, 8, 4, 7, is a farming implement. My 11, 6, 9, 8, is what every reader of the A. O. is looking for. My 11, 3, 2, 5, is a part of a lily. My 13, 4, 4, 8, is what is occurring at present in regard to coal. My 1, 12, 8, is what is made at an auction. My 11, 3, 12, 2, 8, is what most birds do in May or June. My 7, 10, 5, 6, 13, is the name of a bird that is commonly known. My 9, 3, 5, is what a cat does to sharpen her claws. All the letters form two birds that are among the first to come in the Spring.

WM. SCHNEIDER, Lacrosse, Wis.

BIRDS THAT TELL THEIR NAMES.

How many birds do you know that call their own names? There is one little fellow that is with us winter and summer, and we all know and like him. He is gray on the back, and white below, and wears a black cap on his head, and he nests in a hole in a tree, sometimes in an old woodpecker's hole, though he is not a woodpecker himself. We will call him No. 1. Number 2 is a great many times larger, and all his ways are different. To begin with, he lives on the ground nearly all the time, nests on the ground, even roosts on the ground. When he and the friends that are with him sit in a circle, huddled together to

keep warm, but with their heads out so they are all ready to fly up should an enemy appear. He belongs to the same family as chickens, and his bill is very like theirs; he walks too, instead of hopping like most of our birds, and his name would do very well for a boy instead of a bird; the call that gave it to him is a loud clear whistle. He has a pretty hard time in the fall when the hunters are out. Number 3, is a sparrow, that as spring comes, goes up toward New England and Canada to nest, but before he leaves his winter home he whistles such a clear, sweet little song; two or three single notes and then one word repeated three times, and this word, with "bird" after it is one of his names. But before singing time comes you may hear another of his notes, a sharp "chink" given by one bird after another as they are settling down for the night in some hedge or thick clump of bushes.

ISABELLA MCLEMMON, Englewood, N. J.

(Numbers 4-5-6-7 will be given next month.)

GLEANINGS.

THE HOUSE WREN.

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C. C. ABBOTT.

I guess the pussy-willows now
 Are creeping out on every bough
 Along the brook, and robins look
 For early worms behind the plow.

VAN DYKE.

TELLTALES.

Pussy-willow had a secret that the snow-drops whispered her.
 And she purred it to the south-wind while it stroked her velvet fur;
 And the south-wind hummed it softly to the busy honey-bee,
 And they buzzed it to the blossoms on the scarlet maple tree;
 And these dropped it to the wood-brooks brimming full of melted snow,
 And the brooks told Robin Redbreast, as they chattered to and fro;
 Little Robin could not keep it, so he sang it loud and clear
 To the sleepy fields and meadows: "Wake up! Cheer up! Spring is
 here!"

MRS. CHARLES.



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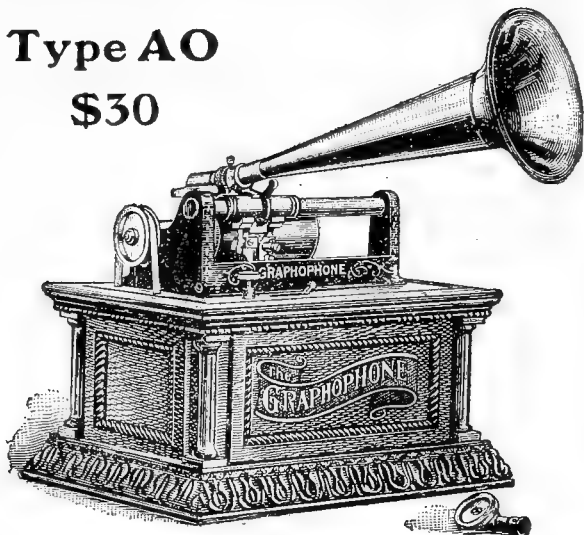
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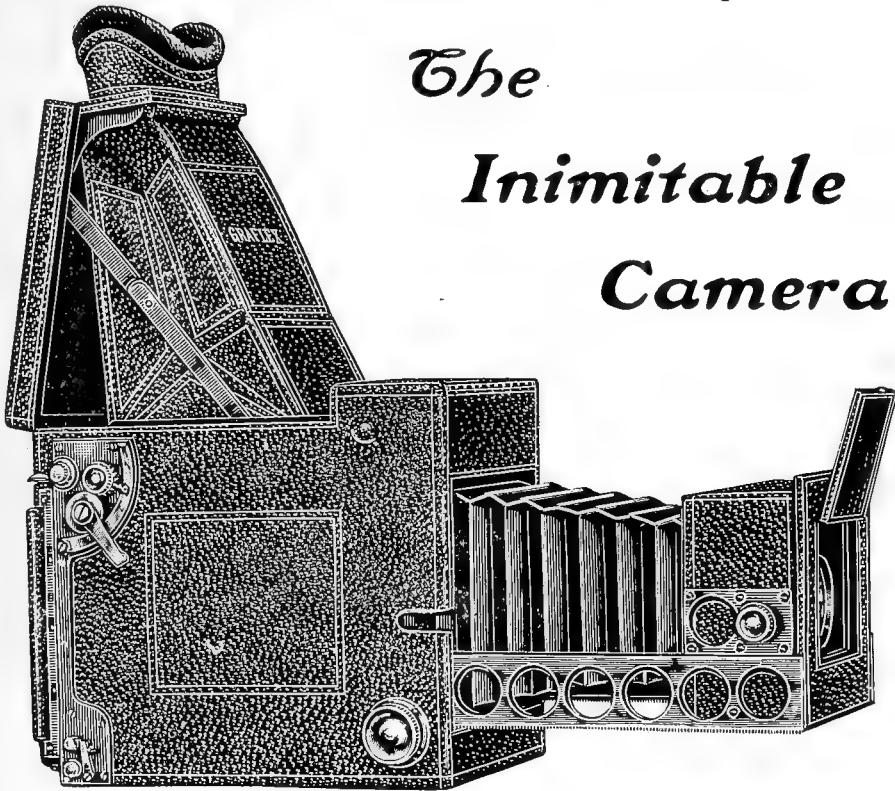
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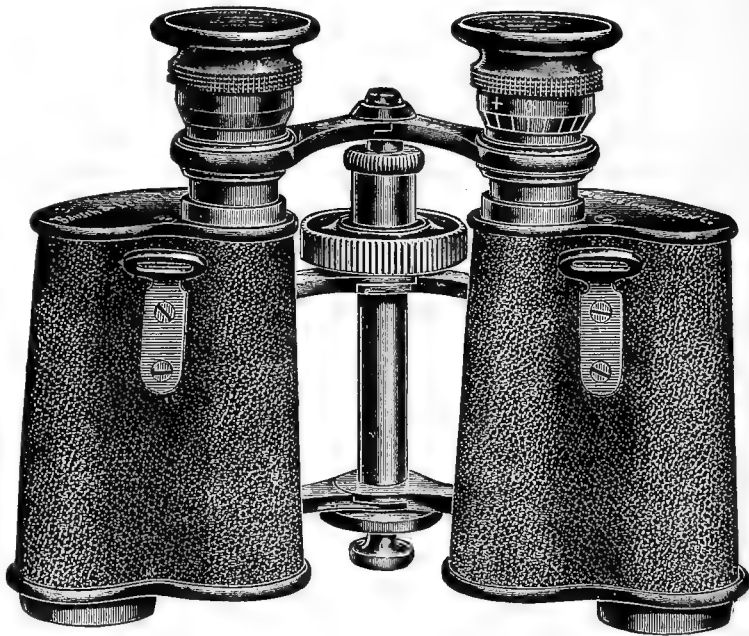
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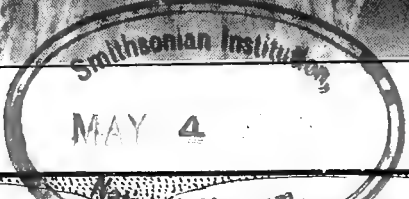
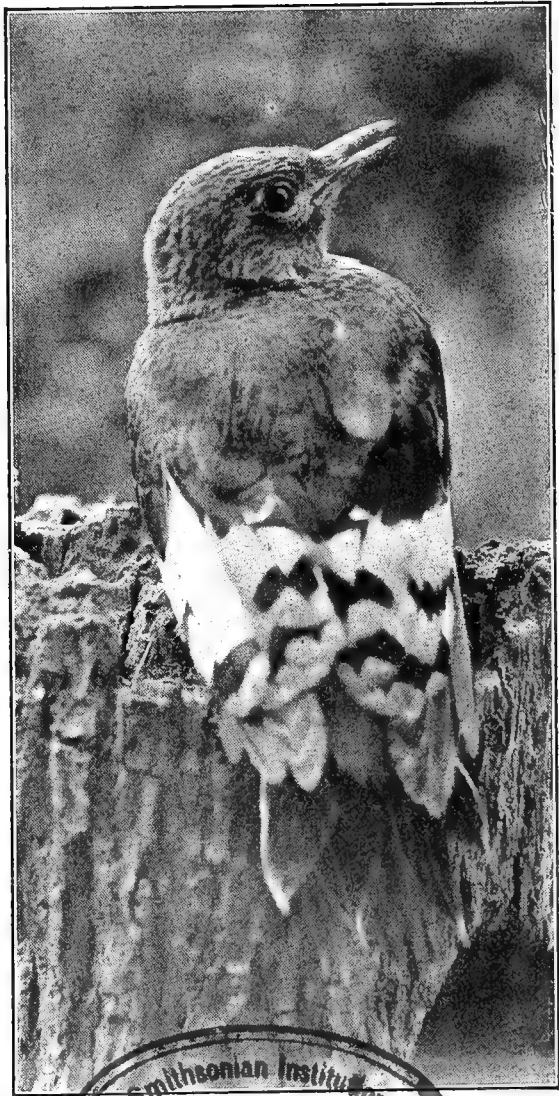
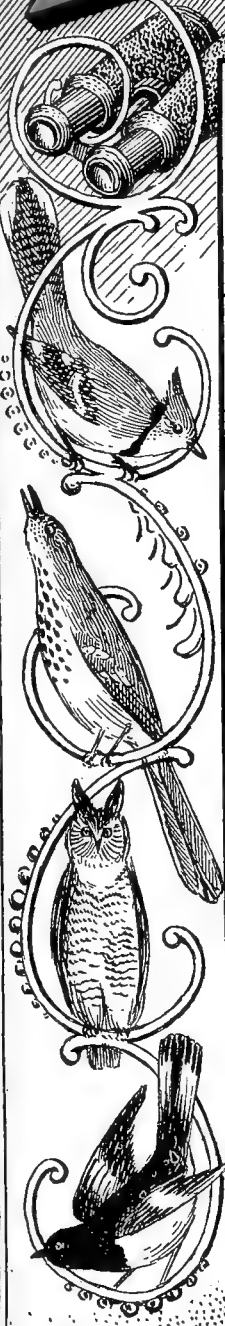
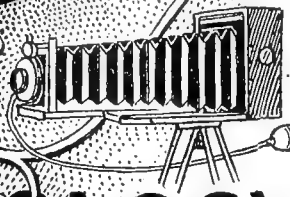
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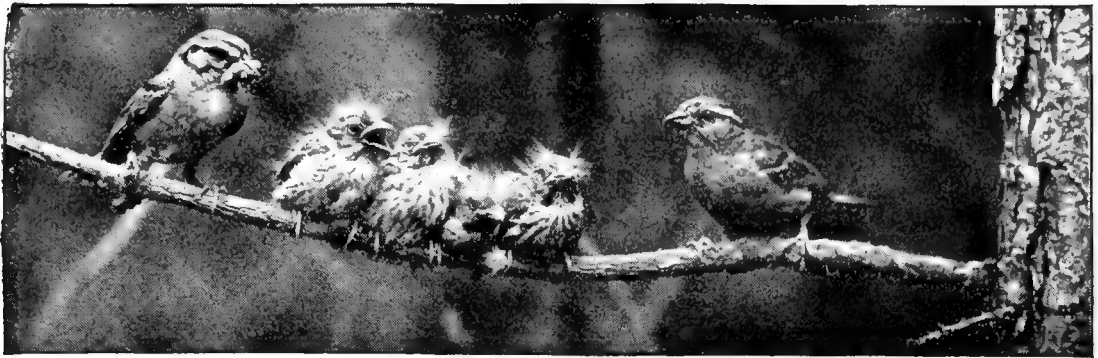
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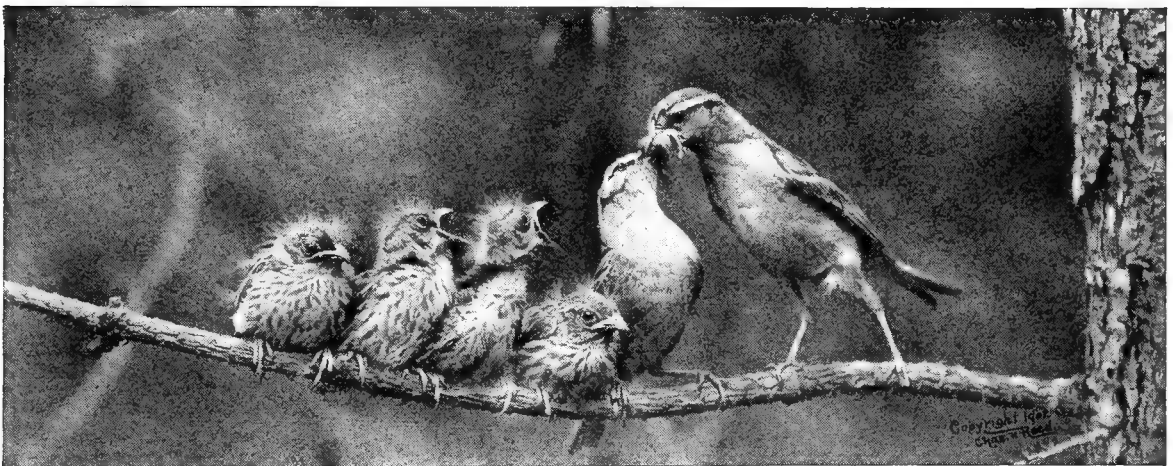


The Chippy Family.

LIFE-SIZED (on paper 12x20) and tinted in Natural Colors

Is given free with every subscription during 1903. This photograph is said by experts to be the most perfect portrait ever made of an entire family of live wild birds. Everyone who sees it wants it.

It is just the right size for framing and should be in every home and school in the country. These Chipping Sparrows are one of the most useful birds that we have. They are found commonly in all parts of the country and should not be confounded with that useless pest, the English Sparrow. Hence the value of this picture as an object lesson to the children as well as an ornament for the walls. IT IS GIVEN FREE as stated above.



PREPARING BREAKFAST. (Greatly reduced.)

This is the companion photograph to the above, and is very nearly its equal, and perhaps more interesting because of the supplicant attitude of the young birds, as they watch their parents breaking the green worm which is to form part of their dinner.

This beautiful art picture is given free to any of our subscribers, who secure a new subscriber.

It is for sale at 50 cts. a copy, or you can get the pair of pictures and AMERICAN ORNITHOLOGY for one year for \$1.25.

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American Ornithology, Worcester, Mass.

American Ornithology.

A Magazine Devoted Wholly to Birds.

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VOL. III

MAY, 1903.

NO. 5.

May is here ; the banner bird month of the whole year. Let each of our readers who are physically able, take outings these pleasant mornings, and then write his or her experiences to AMERICAN ORNITHOLOGY so that those unfortunates who are unable to enjoy your advantages, may at least share your pleasures by reading your stories.

ARE WE RIGHT?

Now a word in regard to AMERICAN ORNITHOLOGY. We fully expect to double our circulation in the next two months and we ask you to co-operate with us in this work. The total number of persons who are interested in birds is enormous, but only a few of these reside in each city and town, and we have no means of bringing our magazine to the attention of the greater part of them. We believe that each one of our readers has friends or knows of persons who are interested, and we also believe that each of our readers is sufficiently interested in this magazine to bring it to the attention of these friends. Are we right? We are willing to meet you half way, and to reward you for a kind word in our behalf, we have secured a large number of one of the most popular games published. We give one of these Bird games free, together with the picture "Preparing Breakfast," to each one of our subscribers who will secure for us a new subscriber. Our volume, this year, will contain about 500 pages, and anyone can get a great deal more than one dollar's worth of value from it. Besides we give each new subscriber the remarkable photograph "The Chippy Family."

CHIPPING SPARROW.

A. O. U. No. 560.

(*Spizella socialis*)

RANGE.

North America east of the Rocky Mountains, breeding from the Gulf States northwards and wintering in Mexico.

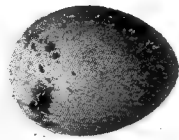
DESCRIPTION.

Length, 5.25 in.; extent, 6.5 in.; tail, 2 in. crown, chestnut; forehead, black with a white stripe through the center. A light gray line over the eye, and a black one through it. Upper parts grayish, streaked with brown, wings and tail brownish, the former with two narrow bands of white across them. The under parts are pale gray almost white.

The male bird differs from the female in frequently having a more or less distinct line of blackish extending from the base of the bill downwards. Young birds have the crown dull brown, streaked with black, and birds of the first year have the breast also streaked with brown.

NEST AND EGGS.

Chipping Sparrows build their nests in bushes or trees at heights varying from two to twenty feet from the ground. Their favorite location is an apple orchard and several pairs may be found in one orchard as they are social birds and always at peace with other birds as well as



their own kind. The nest is made of grasses and roots and lined with horsehair. They are delicately made nests and frequently it is possible to see the eggs through the bottom of the nest. They lay three or four eggs of a pale bluish green color. These are speckled chiefly around the larger end with black and purplish brown.

WESTERN CHIPPING SPARROW.

A. O. U. No. 560a.

(*Spizella socialis arizonae*)

RANGE.

West of the Rocky Mountains on the Pacific slope.

DESCRIPTION.

Varies from the Eastern Chippy chiefly in the darker gray color of the under parts and duller or streaked appearance of the crown. The nest and eggs are the same as those of the eastern bird.



Fig. 1.

Photo from life by C. A. Reed.

A CHIPPY PORTRAIT.

HABITS.



THE little Chipping Sparrows are abundant over nearly the whole of the United States. The original bird occupies the East while its subspecies takes its place in the western part of the country. The specific name of "socialis" is very aptly given to these birds, for they are extremely sociable both among themselves and with human beings.

In the country, especially, they will build their nests right in the door-yards and even in the larger cities, on the outskirts, they frequently take up their abode in the woodbine which is commonly used to decorate piazzas. About farms you will find that

nearly every orchard tree contains one of their little horse hair domiciles,—dainty little structures strengthened on the outside by a framework of rootlets.

Just as delicate and more fragile than the nest, are the three or four speckled blue eggs that are snugly ensconced in its cup-shaped interior. The little chippy babies have one of the pleasantest homes that it is



Photo from life by Dr. J. B. Pardoe.

possible for birdlets to have,—rocked and refreshed by the cool breezes, and protected from the stifling heat of a noon-day sun by overhanging leaves.

A few Chipping Sparrows winter along the southern borders of the United States but the great majority go still further southward. On their return they reach the southern borders about the first of March and arrive in New England soon after the first of April. They seem to reach the southern part of the United States in large flocks of fifty to a hundred individuals and from then on as they proceed northwards, to break up into smaller detachments, so that by the time they reach New England, they are already mated for the season. Numbers of them pass on still further and nest about Hudson Bay and to southern Alaska.



Fig. 2.

Photo from life by C. A. Reed.

THE HOME IN THE PINE.

Their first appearance is heralded by a strange ditty from the orchard, a rapidly executed chipping which might almost be called a trill. In regards to song, Chipping Sparrows are less favored than most others for this is their only effort in the musical line, their only other note being the decisive chip of the excited parents when disturbed. It is

amazing how little interest a great many take in our common birds. I have known men,—acknowledged sportsmen,—who knew where every favorite haunt in their vicinity, for grouse, quail or woodcock, was located, but who knew absolutely nothing concerning even the most common of any of the other birds. To them, there were, besides the game birds, but three other kinds;—crows, “hen hawks,” and either sparrows or “chippies,” this latter class including all birds smaller than a crow. Not only did they not know their names, but I have seen them pass right under a tree where a grosbeak or tanager were pouring forth their melody without either hearing it or being aware of the existence of such a bird.

In view of such extreme cases of ignorance it is not extraordinary that so many fail to distinguish between the Chipping Sparrow and the the imported English pest which is so common about the streets. Consequently the young enthusiast is frequently discouraged when describing to some friend, the unusual tameness or odd nesting site of some of our wild sparrows, to have that individual remark that some of them built up under his piazza or back of the blinds, which places, the English Sparrows so often frequent, to the sorrow of the owners of the dwelling.

Chipping Sparrows are perhaps more often than any other bird, forced to be the nurse to young Cowbirds, very often losing their own young as a result of caring for this interloper. It not only appears ludicrous but seems to be the height of folly for this little bird to feed that large youngster. I have seen fully grown young cowbirds, having complete powers of flight, with fluttering wings and the supplicant notes of the just fledged young, begging for the food which the little bird, barely a

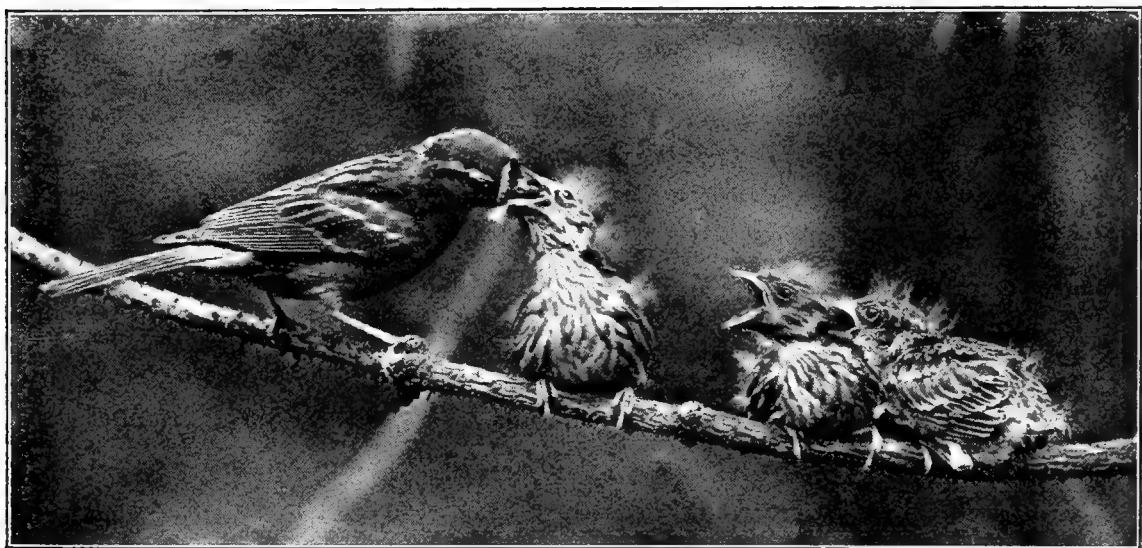


Fig. 3.

ALL HUNGRY.

Photo from life by C. A. Reed.

quarter of his size, had brought. When she would fly off for more food for him, he would follow and be on hand with his piteous appeals for more. As this was during the last of August and the young cowbird showed no signs of helping himself to food, it looked as though this poor Chipping Sparrow has a life work in the task of feeding one useless bird. Perhaps cowbirds are of more value to mankind than they appear to be, for it is certain that their young, on account of their voracity, cause the insect eating foster parents to destroy a great many more insects than they otherwise would for the needs of their own brood.

On June 27th a Chipping Sparrow was seen flying through a small growth of pines. This was nothing unusual, but as she had food in her

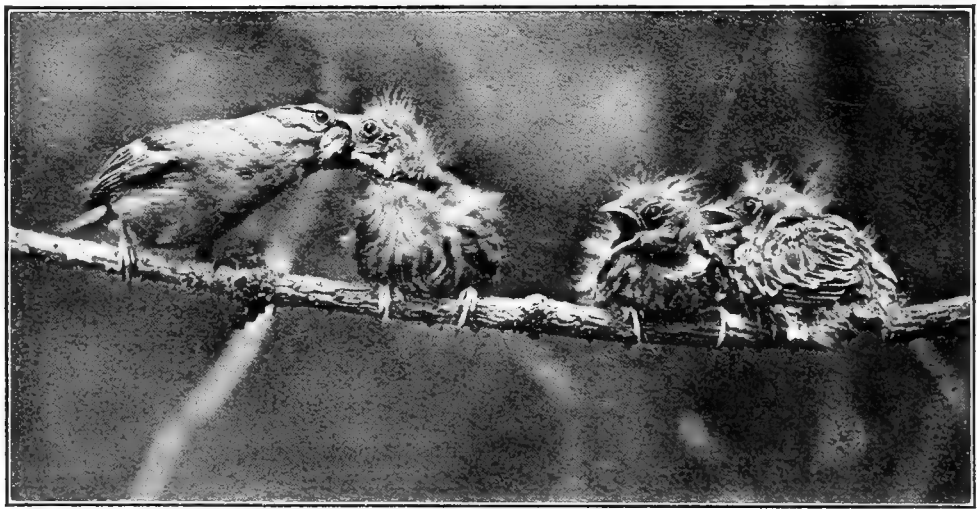


Fig. 4.

Photo from life by C. A. Reed.

AN ANTIDOTE FOR HUNGER.

bill she was under observation until she disappeared in the top of a low pine. The voices of the young could be plainly heard coming from the same place, but so well was the nest concealed by the numerous needles that several trips around the tree failed to reveal it. Parting the needles at the top, we opened to view the pretty scene of a mother Chippy and her family of four. Even though we had interrupted them at breakfast, they showed no anger, but seemed to regard us with as much curiosity as we did them. It is a strange fact that this pair of birds nesting as they did over a half mile from the nearest house, should have been tamer and shown less fear of the camera than did a pair which nested in a public park where thousands passed within three feet of the nest every day.

They were a bright looking lot of little ones, reared in this cozy and secure home, where the sunlight filtered down through the same needles which protected them from the breeze which always swept across

the top of the hill. Fig. 1, "A Chippy Portrait" is a picture of the male Chipping Sparrow on his first visit to the nest after we had found it. He is intently regarding the camera and his curiosity is shown by the elevated feathers on top of his head, thereby making it look as though he had a crest. Two of the youngsters may also be seen, one on either side of him. He came simply to investigate and did not bring any food on this trip.

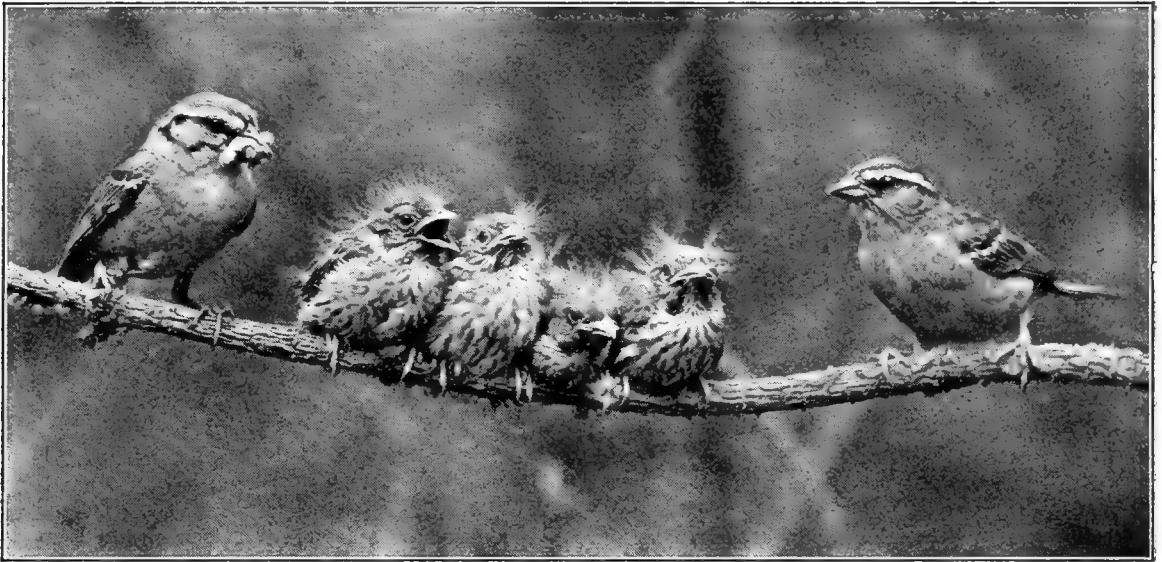


Fig. 5.

Photo from life C. A. Reed.

THE CHIPPY FAMILY.

A few moments later Mrs. Chippy was seen coming from the tree towards the nest, bringing a small caterpillar and the father at once left. As the female reached the edge of the nest, all of the young rushed to meet her. They were so eager for the food that they could not wait to have their pictures taken, and so are poorly shown in Fig. 2. These two photographs and two others in which both the adults and the little ones beat the camera shutter are all that were made the first day.

The following day was one of those few perfect photographic days, when all conditions are satisfactory. The sun was concealed by a uniform mass of clouds of just sufficient density to prevent it from casting a shadow. At nine o'clock we were back in the grove again to see our new acquaintances. Although the young had appeared very smart the day before, we were, nevertheless, surprised to find that they had all left the nest. Two of them were sitting on the limbs of a neighboring dead pine and the other two had flown off. After watching the old birds from a distance, for quite a while, we at last located the missing

ones and returned them to the side of their mates, who had already been carefully focussed in the camera. After having once tested their wings and found that they could use them they were not content to sit quietly in a row with their brothers, and every few minutes one or the other would make a short excursion, and it was only after a number of attempts that they understood that we wished them to sit where we put them. Even then the lesson was but half learned for at frequent intervals after one of them had to be brought back.

The old birds did not seem to be alarmed as to the safety of their little ones and quietly perched on each side of us watching until we had the whole lot arranged to our satisfaction, and then one of them flew away after food. Soon he returned and at once went to feed the young while his mate flew away after some more. They continued this routine

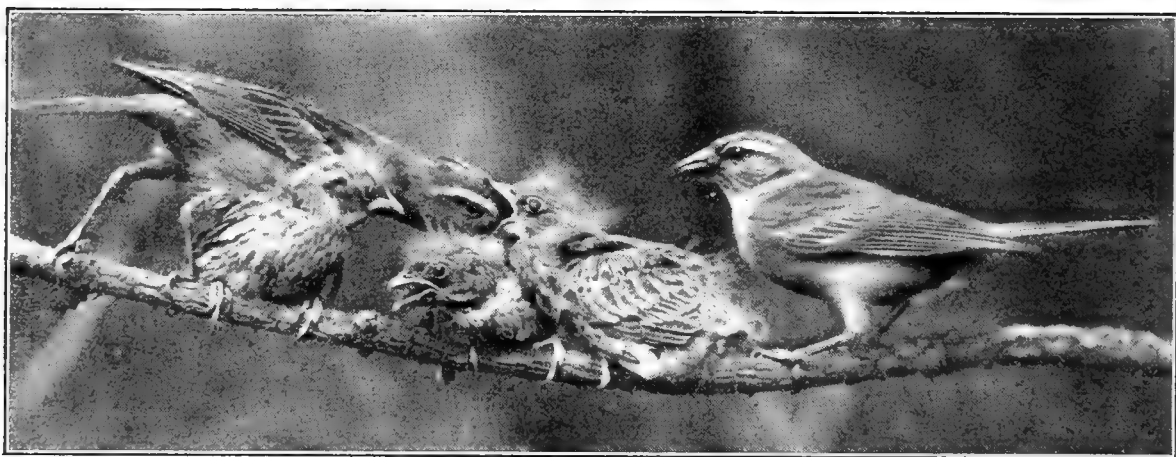


Fig. 6.

Photo from life by C. A. Reed.

A LONG REACH.

performance for some time, one going as soon as the other returned. Fig. 3 shows how the female serves food, while Fig. 4 shows how the male bird gives his antidote for hunger. You will notice that on each of these occasions, one of the little ones had taken his departure. He was a very forward fellow and thought that he was entirely competent to look after himself.

Seeing how regular the adults were in taking turns feeding the young we began to scheme to see if we could not get both of them to alight on the branch at the same time. We finally hit upon a plan that worked to perfection. As soon as one of the birds had left, by walking up to the little ones we could keep the other from delivering his provender until we saw his mate returning. In this way we managed on several trips to get both of the adults on the branch at once. Fig. 5 is a group portrait of the entire family. The bird on the right is the

female. She had just fed the two little ones nearest her and was about to go when the male lit on the opposite side of the branch. He had a large worm in his bill, with which to satisfy the hunger of the remain-two.

Fig. 6 shows that the disobedient bird child has run or flown away again. It will be seen that the male who is feeding the young one that is farthest from him, is reaching over two and the space where the third one was. It is no mean acrobat who can thus maintain his position with his center of gravity so far in advance of his support. The last illustration shows one of the incidents in bird life that is rarely seen. The male bird is the one next to the young. He had just fed the one at his side when the mother came with an unusually large green worm. To our surprise, instead of alighting at the opposite side of the quartet, she lit at the side of her mate. In bird language she instructed him what to do, and the next moment he had hold of one end of the worm bearing down with all his might while she lifted up on her end until it broke in the middle. The two youngsters who have anticipation written on every line of their faces, were the recipients of the broken morsel, after which they assumed the quiet attitudes of their brothers.

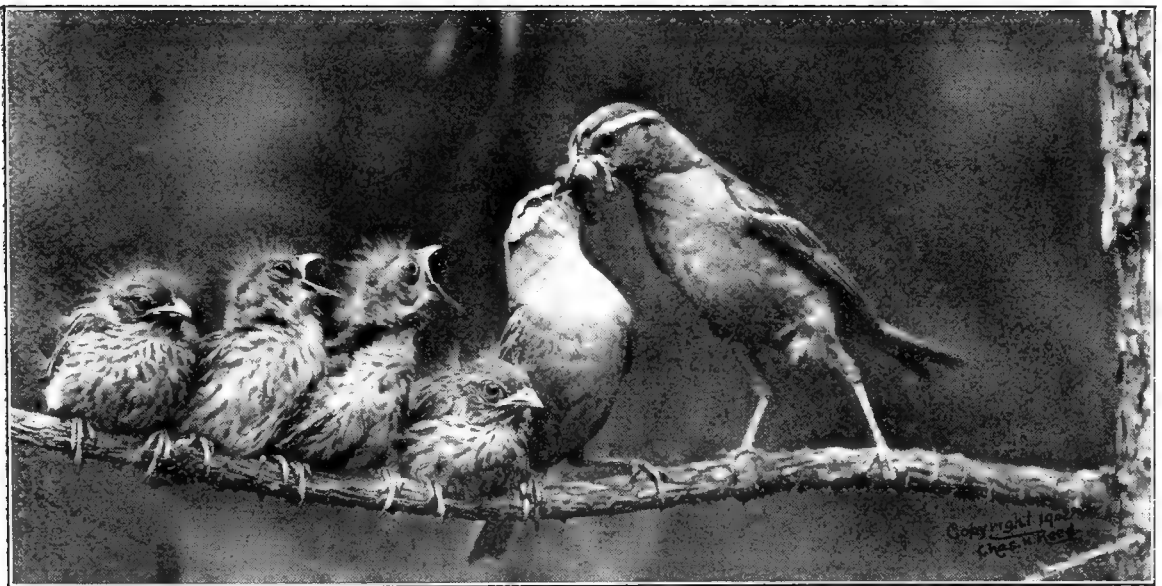


Fig. 7.

Photo from life by C. A. Reed.

PREPARING BREAKFAST.

BIRDS IN THEIR HAUNTS.

The relation of the bird to the landscape—how often any bird-lover has *felt* this but never really *thought* of it! We find it on every side, yet make no comment. To show how widespread it is, let us take several representative birds.

I.

The Wood Pewee.—With this bird I always associate a languid, mid-summer noon. I always remember a beautiful mountain lake, with its soft waters; the glassy reflections of the trees, and reeds broken occasionally by the movement of some insect or fish; the azure sky overhead with the full glare of the hot sun at noon. The soft dark green of the heavy pines relieved by the tall beech and white birch trees; the emerald green swamp grass, and the slender blue reeds; then the dreaminess of life! Nature is taking her midday nap; most of the birds are silent, but from across the lake comes “the sweet, dreamy, midday call of the Pewee” (Chapman) and the monotonous notes of the Red-eyed Vireo; the insects also are resting, but not silent; the oppressive air is filled with the chirp of the crickets and the buzz of the cicadas, while myriads of smaller insects join in, making a drowsy, dreamy, unbroken, confused murmur. Thus, it seems to me, is the Pewee related to the landscape.

II.

The Slate-colored Junco.—The opposite of the Pewee in almost every respect. Quite different recollections does the name of this bird bring back. Invariably I think of a certain tramp in the country last February on one of those days when—as Frank Bolles says—“one had to be pessimistic to realize that it was only a mocking grin on the mask of winter and not a smile on the lips of spring.” The sun was sending its warm rays down on the earth, melting the few spots of snow that yet survived. Though at times the sky was hazy, no clouds of any weight obscured the sun. From the north came a very light breeze, not at all cold, but how exhilarating! It was one of those days when one feels so much and thinks so much. What fond recollections each familiar spot brought back! Here I saw a Cerulean Warbler; here a Chestnut-sided; and here along this stream, I first heard the wild, ringing notes of the Louisiana Water-thrush. But now all are gone. Not a sound comes from the woods once so full of life. The gentle breeze makes (not “laughter in the poplar trees”) a sound of death. Each leaf as it loosens its last grip on a maple or oak, falls and is caught by the breeze, I walk on sadly enough along the road with the big trees on either side. In ten minutes I am once more in an open country.

Ah! at last. Not all the birds have left us, after all. I feel all the more glad to see these.—A party of Juncos, with a sharp “tsip” fly from a patch of dry weeds across a bushy hillside.

III.

Louisiana Waterthrush.—I never think of this bird without remembering that day in early May when I first made my acquaintance with it. It was in a wild little valley with a mossy stream in the middle. The slopes were heavily clad, —big deciduous trees, such as oak and maple and beech, towered over the bluish pines and hemlocks making the ground below dark and damp. The underbrush was thick.

One side of the hill was quite covered with the bluish three-branched leaves of the hepatica. Everything had a delightfully damp, cool, woodsy smell. Though the meadows a half mile away may have been drying under a hot sun, it was quite different here; a few silver spots alone found their way through the dense foliage. Not many birds haunt such woods, though as I looked up I saw a few warblers flitting about among the tree-tops, and heard a woodpecker tattooing on a dead limb. Then I saw a wagtail. The white line over the eye told me it was a Louisiana Waterthrush. I soon saw his mate. They were busily searching along the stream, continually uttering a metallic “chip.” In a few minutes they had disappeared behind a turn in the stream. Suddenly I heard the most glorious, wild, ringing notes. Hurrying in the direction from which the song came, I soon found that it was indeed the Water-thrush. There he was, his whole soul poured into the song, all animation. Several high, flute-like notes, loud and clear, then a rapid scale, running down. The notes left me quite delighted.

IV.

Vesper Sparrow.—“The Poet of the Fields.” With the song—rather than the singer—I once more am in the meadows on a still evening of July. The sun has just sunk behind the western hills, leaving in its place a gorgeous mass of fire. Over this rise banks of clouds not so brilliant, then others still lighter, almost Flamingo-colored. Overhead are a collection of soft sheep-clouds, almost translucent. The eastern sky seems a greenish-purple by comparison. The fields towards the west reflect the magnificence of the sky, those towards the east are a soft bluish green. On one side is a large bluish belt of woodland, then a field of rye, and beyond a snug little farmhouse. All a picture of calm. The evening is one of those peaceful ones when everything is at harmony. And from a pasture on one side come those rich notes, so eloquent, so beautiful, so at peace with all, they win my heart at once.

V.

House Wren.—None of those mentioned can fill his place, he is the embodiment of life, activity, and energy. In the midst of a deserted bit of land stands a little shed that “has seen better days.” Immense weeds cover the little walk that leads to the shed. Not far away is a neglected orchard in full blossom from which comes the endearing notes of the Bluebird. The day is bright; the sun shines gloriously on high; the sky is a deep blue; the earth is green and beautiful. An active little “chip” an active little hop, and from a little heap of brush comes a House Wren. With an angry little note he flies to a small tree, then down again, then to the other side of the brush, then with an undulating flight to another heap of brush, and lastly to the roof of the shed. There, on the gable he perches, and lets flow one of the most wonderful liquid songs in all Bird-dom. He seems fully as animated as our Water-thrush, but his notes lack the wildness so characteristic of that bird, they would be altogether out of place in the dense woods. He is all energy; a minute wasted is a sin. Even his song is short; he flies from his perch to go on with his persecution of the insects. And who would want to see a Wood Pewee at the damp side of a stream, or a Water-thrush trilling his wonderful notes from a tree, during the drowsy month of August, or the Junco at a House Wren’s home, or a Vesper Sparrow in the dense woods.

I for one say, each bird where it belongs. Nature cannot be bettered. And it is the situation in which we find the bird, as much as the bird itself that makes us respect it, or sympathize with it, or love it as the case may be.

NORMAN O. FORESTER.

A SPRING SONG.

Nature now smiles after winter’s long wait,
 Joys in the air and the earth is elate,
 Never a bird that will find not his mate
 And start keeping house at a very brisk rate;
 Eros the sprite, from far up his height,
 Shoots forth his arrows and blisses,
 And everything rhymes to the joyful times,
 In such a season as this is.

“Cheer up! Cheer up!” listen and hear,
 Listen to the robin so loud and clear—
 Upstart bard with never a fear,
 Singing so gay in the spring of the year.
 While poets, methink, are spilling their ink,
 In a practical land such as this is,
 We pass them unheeded, they never are needed,
 When robin is telling his blisses.

O, bluebird, you're dyed in the deeps of the sky,
 Your beauty dazzles the soul and the eye,
 Yet with lowly mien near the earth you fly,
 Or sing on the fence rail cheerily;

Or with liquid call from the garden wall
 You lure your mate to love's blisses—

Ah! fond and true will she be to you
 In such a season as this is.

The song sparrow trills his ecstatic note,
 There's a music-box in his dear little throat.

O, list to the gurgle, it seemeth to float
 Like waves round the prow of a fairy boat.

The griefs of the past, O! they never can last,
 When we hear such a carol as this is.

So forgive and forget, cease to worry and fret,
 And share with the sparrow his blisses.

O! who can be sullen and sad in the spring?
 For smiles let us laugh and for speech let us sing,
 And haste to the woods that so merrily ring.

Where Joy reigns as queen and where Love rules as king.

Sorrow, goodbye! from the spring-time you fly,
 And leave us to buds, birds and blisses,

'Tis Eden again for the children of men
 In such a season as this is.

BERTHA A. JOSLYN.

THE KINGFISHER.

On March 27th, I was in some small woods gathering wild flowers near a pond, when I recognized a Kingfisher's rattle. The chattering I heard was so like a squirrel's that for a moment I thought I had mistaken the latter's conversation for the bird's call.

I approached the edge of the pond in order to make sure. In a moment there was a swoop of light blue, a violent splash and the Kingfisher rose to his perch proclaiming his victory.

I watched him for nearly an hour with great interest. During that time he dove four times and was successful every time. The contortions he went through in his efforts to swallow the fish were both ludicrous and touching. The beautiful bird, beautiful even though his bill is out of proportion to the size of his head, seems so full of his success that his subsequent discomfort during the swallowing process was in sharp contrast to his former expression.

About three quarters of an hour after his first dive the Kingfisher began to disgorge what I judged to be the bones of his first captive and only of that one as that torture lasted but a moment: At this point the Kingfisher seemed satisfied with his luncheon and flew away into the woods, out of sight.

I saw this Kingfisher very clearly as I was but a few feet away from him, and to me he seemed undersized, or at least a good deal smaller than the ones I saw last summer in Maine. He didn't look any larger than a Robin, but I am perfectly certain he was not an immature bird as his coloring was that of a full grown bird in every detail.

JEAN LAMPTON.

BALTIMORE ORIOLE.

A. O. U. No. 507.

(Icterus galbula-

RANGE.

The United States east of the Rocky Mountains. North to Ontario and Manitoba and south in winter to Central America.

DESCRIPTION.

Length, 6.75 in.; extent, 9.5 in.; tail, 2.7 in. Adult, male: entire head, neck, throat and upper back, black. Rest of under parts, lower back, rump, and terminal half of outer tail feathers, intense orange or flame color. Wings, with the exception of the orange shoulder are black, most of the feathers being edged with white and the greater coverts tipped with white. Female and young: entire under parts, dull orange or saffron color. No black on the head which is brownish orange like the tail. Back and wings grayish, the latter edged and tipped with white as in the male.

NEST AND EGGS.

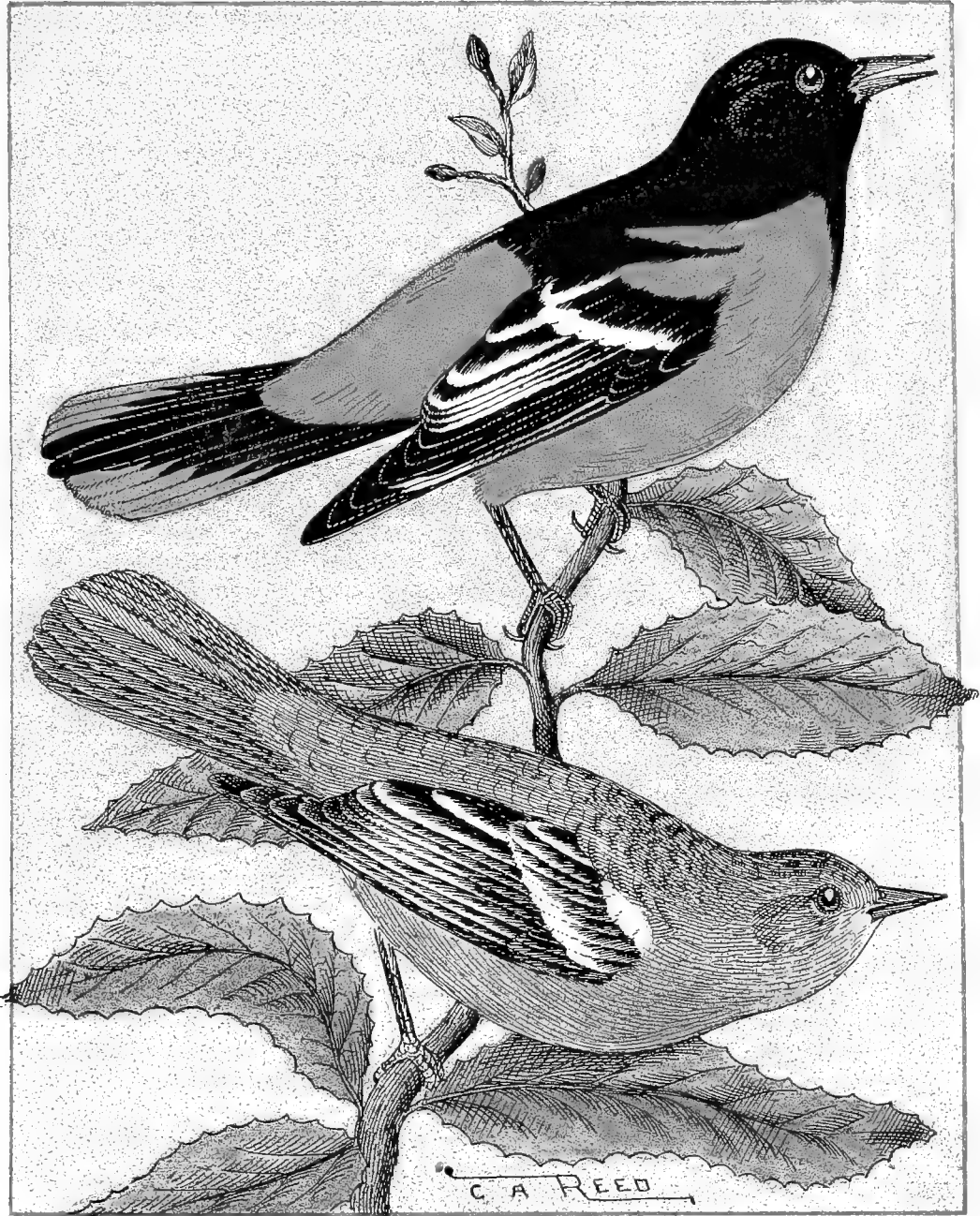


The Baltimore Oriole builds one of the most unique of all North American bird's nests, a long pensile purse which is suspended generally from the long outer limbs of some large tree. Elms seem to be their favorites when they can be found. In orchards they also frequently build in pear trees. In most instances their nests are among the most difficult to get at, although they are easy to find. They lay from four to six grayish white eggs which are curiously scrawled with black lines. Their eggs are laid during the latter part of May.

HABITS.

The Baltimore Oriole is variously known at the "Fire Bird," "Hang Nest," Weaver or Tailor Bird," Golden Robin," and more locally by a number of others. They are generally conceded to be one, if not, the most beautiful of North American birds. Besides their beautiful plumage they have a very clear and attractive song which they are wont to deliver very frequently during the spring and summer months. It is a pure whistling melody that few birds can equal or surpass.

Their peculiar nest has probably attracted more attention to this bird than any other one thing. It is very strongly woven of string, grasses, fibers, caterpillar nests, etc., and frequently attains a length of seven or



BALTIMORE ORIOLE.

[Male and Female.]

eight inches. So firmly are they attached to the branches from which they are swung that they frequently remain intact for several years, although they are never used but once. During the winter months when the trees are bare, a great many of these can be seen, indicating to a certain extent the oriole population of the previous year.

Occasionally they will build these nests on the lower hanging branches of elms where they are within reach of the ground, but more often they are far out on limbs at a great elevation from the ground, where even the small boy or nimble cat cannot explore the contents.

They generally make their appearance in New England about the 10th of May and until the middle of July their notes attract the attention of everyone capable of observing birds. The males generally come a few days before the females, and seem to be very restless as they move about the budding trees; their notes also seem to be querulous and complaining. It is not until the arrival of the female a few days later that they indulge in their rich full-toned melody. To give any adequate description of the song of an oriole will defy the best efforts of any writer. The female, too, has a song that would ordinarily be considered beautiful were it not for the overshadowing performance of her mate.

The parent orioles are very courageous and resolutely defend their homes against invaders. The female sits upon the eggs for about fourteen days and the young remain in the nest for about ten days longer. Several days before they can fly, they climb to the rim of the nest where they can look out upon the world below them, and incidentally, that they may be ready to receive the food which their parents bring them, as soon as possible. At this period, the wind swaying the branches frequently causes them to lose their balance and either fall back into the nest or sometimes outside to the ground. In the latter case unless they are injured by the fall they are generally able with the assistance of their parents, and by using their bill, wings and feet, to climb to a place of safety where they can remain until they have developed sufficiently to make extended flights.

Orioles both young and adults feed almost entirely upon insects and they destroy large numbers of tent caterpillars and canker-worms. After the young are fully fledged, several families unite and rove about the country together. Both males and females seem to make no attempt at song after the young have left the nest, and only the single sharp, metallic whistle or chirp is heard to denote their presence.

RED-HEADED WOODPECKER.

A. O. U. No. 406.

(Melanerpes erythrocephalus.)

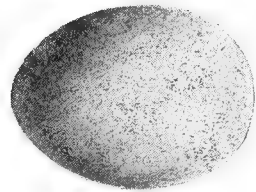
RANGE.

The United States east of the Rocky Mountains. Very rare in New England and uncommon in the eastern parts of the Middle States.

DESCRIPTION.

Length, 9 in.; extent, 17 in.; tail, 3.5 in. Adults:—Whole head, neck and fore-breast, deep red; sometimes with and sometimes without a black border to the red where it meets the white of the under parts. Back, wing and tail, glossy blue black. Secondaries, upper tail coverts, entire under parts, and tips to outer tail feathers, white. Feathers of the wing with black shafts. White of the under part usually tinged with reddish. Young: whole head grayish, streaked with dusky. Back, wings and tail, black, but the feathers are edged with grayish. White secondaries more or less banded or spotted with black. Under parts, dull whitish streaked with gray.

NEST AND EGGS.



These woodpeckers are very common throughout the central portions of the United States, and build their nest in the decayed trunks of any kind of a tree in any location. Frequently telephone poles are used where there is a scarcity of trees, At other times it will nest under the eaves of a roof wherever it can find a suitable cranny. They lay five or six eggs of a glossy white color, tinted with pink, from the yolk of the egg showing through the shell.



Photo by T. Earhart.

YOUNG RED-HEAD.

Identification Chart No. 16.

Woodpeckers.No. 392. Ivory-billed Woodpecker, (*Campophilus principalis*.)

Formerly found in the South Atlantic and Gulf States and in the Mississippi Valley as far north as Illinois. It is now only found locally along the Gulf States. Length, 19 in. Bill, ivory white. Nasal tuft, stripe on each side of head and down the back, and secondaries, white, Crest on back of head, vermillion. The remainder of the plumage above and below is a beautiful glossy black.

392.

No. 400. Arctic Three-toed Woodpecker, (*Picoides arcticus*.)

Northern North America from the Arctic regions south to the northern tier of states. Crown, yellow. Stripe from bill down sides of the neck, outer tail feathers and entire under parts, white; flanks barred with black. Primaries, barred with white. The remainder of the plumage, including the nasal tufts, black.

No. 401. American Three-toed Woodpecker, (*Picoides americanus*.)

Northern North America, east of the Rocky Mountains, from the Arctic regions south to the northern tier of states. Length, 9 in. Crown, pale yellow, speckled with white on the fore part. Otherwise like the preceding except that the back is barred with white and the outer tail feathers are barred with black.

400.

401

No. 401a. Alaskan Three-toed Woodpecker, (*P. a. alascensis*.)

Found on the Pacific coast from Alaska south to Washington.

401b. Alpine Three-toed Woodpecker, (*P. a. dorsalis*.)

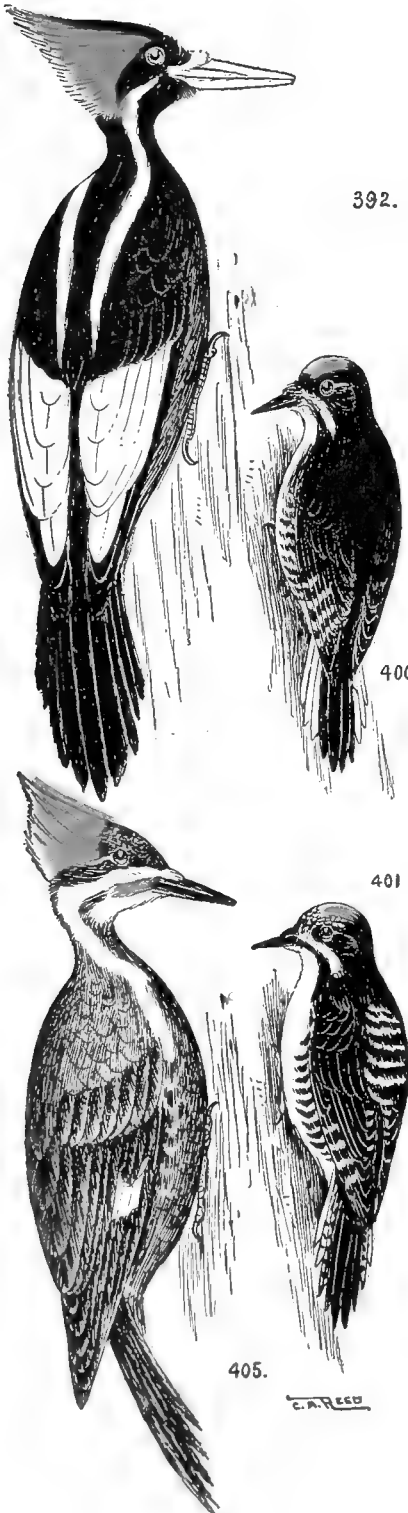
Found in the Rocky Mountains from British Columbia south to New Mexico.

No. 405. Pileated Woodpecker, (*Ceophloeus pileatus*.)

Found in the heavily timbered regions of North America south of middle Canada. Length, 16 in. Bill, horn color. Whole crest and stripe from bill across cheek to below the eye, vermillion. Nasal tufts, chin, stripe from bill down sides of neck and back, and bases of primaries, white. Remainder of plumage sooty black. In the female the red under the eye is replaced by the sooty black.

405.

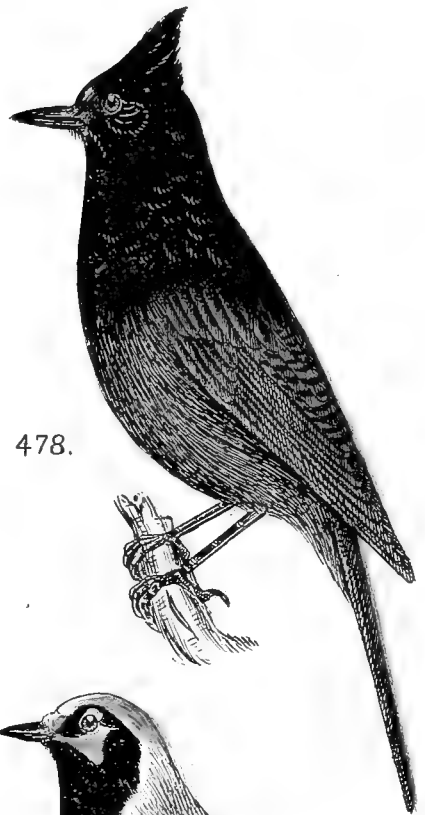
C. A. REED



Jays.

No. 478. Stellar's Jay, (*Cyanocitta stelleri*.)

Pacific coast of North America from Alaska southwards. Length, 11 in. Head black, with the exception of a few blue feathers on the forehead. Neck, breast and upper back, blackish, shading gradually into the dark blue plumage of the rest of the body. The deep blue of the secondaries and tail is crossed by faint black bands. The Stellar group of Jays is divided into several subspecies, none of which, in life, can be separated. They can best be determined from the locality in which they are seen.



478.

No. 478a. Blue-fronted Jay, (*C. s. frontalis*.)

Found on the southern coast ranges of the Pacific Slope.

No. 478c. Black-headed Jay, (*C. s. annectens*.)

Northern Rocky Mountains and west to eastern Washington and Oregon.

No. 483. Green Jay (*Xanthoura luxuosa*.)

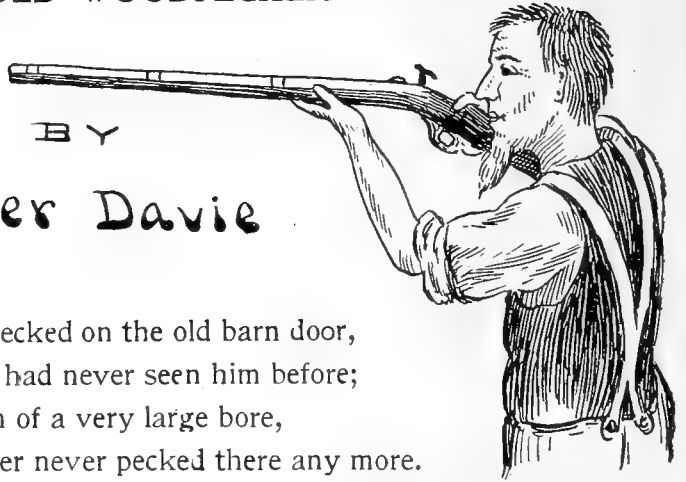
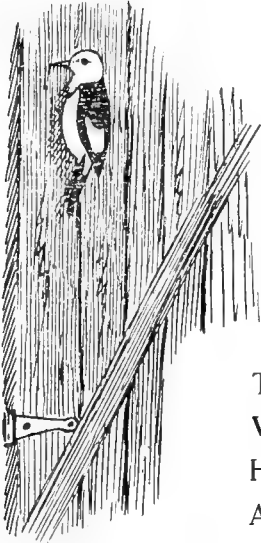
Valley of the Lower Rio Grande in Texas, and eastern Mexico. Crown, nasal tufts, and patch below the eye, bright ultramarine blue, being lighter on the forehead and nasal tufts. Throat, side of head and line through the eye, black. Under parts greenish or yellowish white. Back, wings and tail a decided greenish color shading to a rather bright blue towards the end of the tail. The outer tail feathers are yellowish.



483.

C. A. REED

RED-HEADED WOODPECKER.



BY

Oliver Davie

The woodpecker pecked on the old barn door,
 Where the farmer had never seen him before;
 He got out his gun of a very large bore,
 And the woodpecker never pecked there any more.

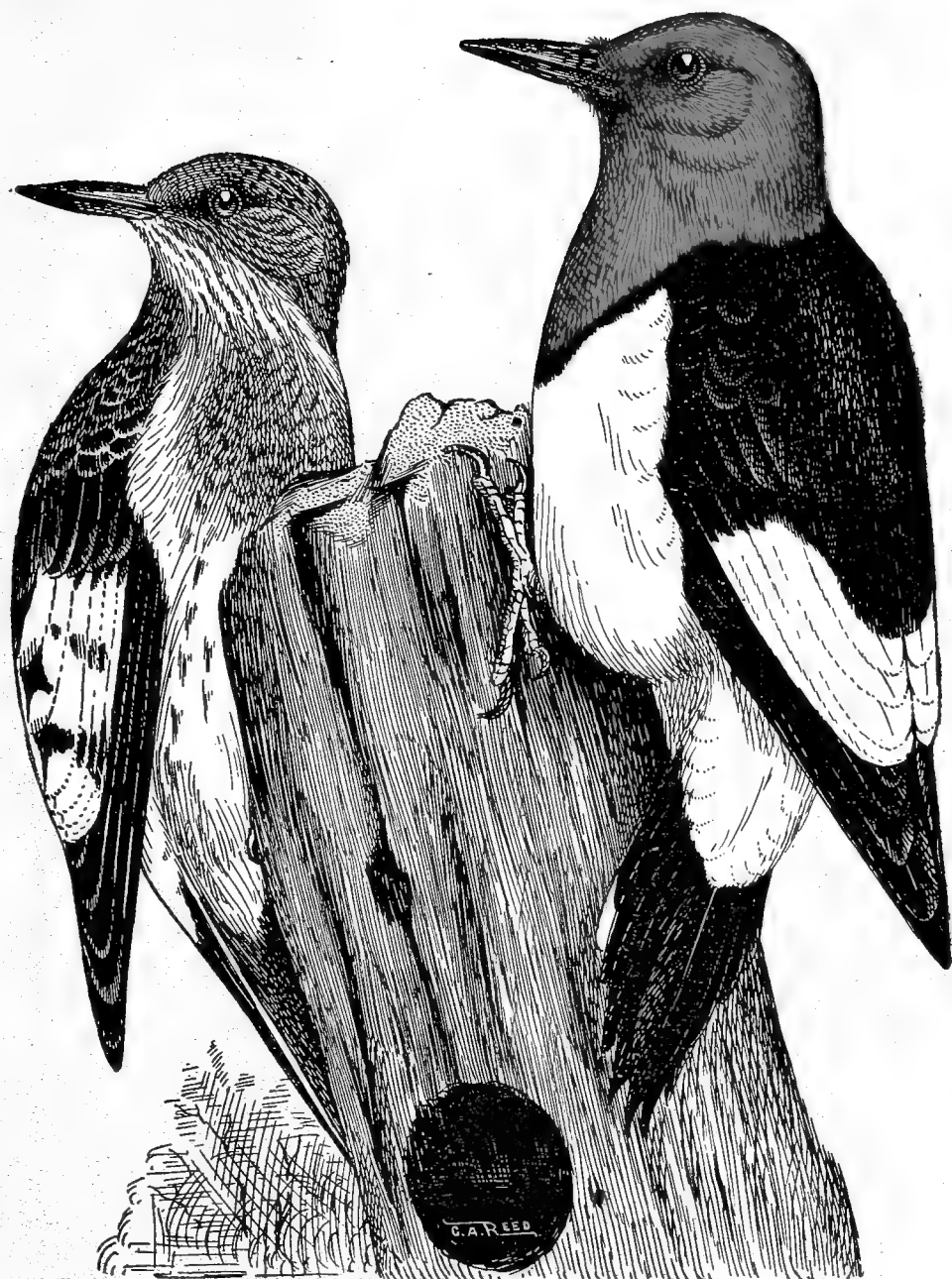
Were I to be transformed into a bird I should prefer to be a woodpecker.

One reason is because he lives in a better house than most birds do. His dwelling is dug in the oak so that its walls are quarter sawed when finished; in the e'm he hews with dexterous skill the tough fibres of the interior to the depth of six or eight inches where the bowl is chiseled enough to accommodate his prospective five or six children.

In the white arm of the sycamore he is satisfied with great hollows in their decaying trunks. In all these places the floor of its home consists of a few chips that fall from the surrounding walls; here its spotless white eggs are laid, and here are reared its little family of ugly babies. Sometimes he selects a hollow in the dead trunk of an apple tree, the interior which he improves with his chisel; here he makes his summer home.

Were I to be a woodpecker I would join the tribe of the Redheads for they are among the most beautiful of the tribes—the most sagacious and war-like, yet gentle and brave at all points of danger for the protection of their home, and offspring. His home is in the trunks of the trees. From these wooden castles and cupalos built by Nature's own hand he can look out of the only window which greets the day—in the house that shelters him from storms on all occasions—midst the deafening roar of thunder, and the vivid glare of lightning he can repose quietly until the elements have stopped warring—until the garments of black clouds are torn asunder—when the sun can look down with his warm smile and prompt vegetation to make the green earth greener than ever—a paradise below for human beings and birds to dwell.

From his log cabin in the air he can see this and more too—he can



RED-HEADED WOODPECKER.

see the farmer tilling the soil and hear his voice commanding his team in the furrows; he can look down on little glassy lakes and little creeks whose surface look like strings of polished silver—he hears the lowing of the herds, and the tinkling of their bells in the early morn; he can have the richest cherries that grow in the orchard and devour the most noxious insects in those trees, covered in early spring with white blossoms, to pay for the little he gets from them.

The caw of the crow, the hysterical cry of the blue jay, and the shriek of the Butcher-bird brings no alarm to him for they cannot break into his mansion of oak and rob him of his young like those birds do in the homes of other birds which have no roofs, to protect them from the storms and enemies. Birds that rear their young in open nests, on branches are most terribly excited when their young begin to fly or to try to fly. This is always the case for, something more than instinct tells them that some animal below is liable to get them.

At this time when the birds are solicitous for the welfare of their young it looks as if there is more than mere instinct in their little breasts, if not reason? Where trouble exists fear always reigns. Of course the Redhead has his faults like any of the human family, but I do not propose to open the closet doors and show the skeleton. I could tell of many bad traits and characteristics, which he naturally inherits, but what is the use? With all his faults he needs no recommendation. Were I a bird I should prefer to be a Redhead, when his little tots are ready to fly, and even when they are not, they can scamper out like mice on the trunk of the tree in which they were born, and earn their own living by digging out little insects which lurk in the bark; all the day long they can keep themselves busy, and when the golden rays of the setting sun tells them that darkness is coming on they can creep up to their little sky-scraper and rest until another morn assures them that their two tiny wings are more fully grown and that they will soon be ready to fly with their parents in the deepest forests where Nature's song has a chord of everlasting music.

Were I a Redhead, I would follow to a letter his tactics in the way of self preservation during the winter months, so far as food is concerned. A coal famine would not alarm me; the only fear perhaps that would enter my mind is that the woodsman might chop down my dwelling for fuel for humanity living below.

Another reason why I admire the Redhead is that he seems to have an extraordinary amount of foresight—in looking out for a rainy day by storing grasshoppers, acorns and beech nuts in the cracks and crevices of the posts, in the cavities of partially decayed trees and under patches of raised bark.

The vegetable food of the Redhead presents considerable variety—dogwood berries, huckleberries, strawberries, wild and cultivated cherries and raspberries, mullberries, wild grapes, apples, pears, etc., His miscellaneous food consists of sumac seeds, ragweed, pigweed and other seeds, including acorns, galls, and flower anthers.

Of course it is always necessary to bear in mind that the food of a bird necessarily varies with the season, and consequently the peculiarity of the tongue is related to some special kind of food, or particular method of obtaining it, pursued during the changing seasons of the year.

The woodpecker's tongue is wonderfully constructed for securing food at all times. The front or horny portion of the tongue is armed on either side with backwardly directed hair-like spines while the smooth bony surface of the tongue is coated with a glue-like saliva to which ants and other insects behind the bark will readily adhere.

Another attachment which the woodpecker has to his tongue, which gives it an extraordinary length when he wants to get an insect which is nearly out of his reach is what is called the hyoid—a Y-shaped soft, flexible bony structure which curves up over the back of the skull and continues on towards the forehead.

When I was a young lad I used to shoot woodpeckers with the rest of the bad boys and we always wondered why we could pull their tongues out so far, for we could never get hold of the tongues of other species which we happened to kill. But now I know it all—perhaps I do? In the month of June, at half past three in the morning by Nature's standard time—before the eastern horizon is streaked with golden red and purple—when the first zephyrs begin to blow—when the faint rustling of the leaves, now wet with dew, sound like the rippling of running waters—when the squawk of the heron is distinctly heard overhead, I have listened to him gently tapping on the hollow trunk along the river bank, apparently trying to arouse his mate from her unseasonable slumber.

In the days of June strange sights may be seen and weird sounds may be heard in the temple of nature.

The splash of some fish is heard on the surface of the little stream as if rising from the shallow depths to catch a breath of the fresh morning air; farther above, like a lot of truant boys we can hear the plunging and diving of a family of musk-rats as they come from their mud cavern along the banks. Back in the woods the Oven-bird is emerging from its dome-shaped nest, by the side of a fallen log uttering its emphatic, startling song, while on the edge of the woods bob-white re-

minds us of his mellow voice. As daylight brightens the kerr, kerr, kerr, of the Redhead becomes more boisterous; his drumming on the hollow tree is louder and, with the hoarse voice of the flycatcher, the loud notes of the Carolina Wren, the tweet, tweet of the sandpiper and bass notes of the clucking blackbird tells us that the day has been opened in the temple of nature by choristers whose voices are those of the Master.

These beauties can be seen and these songs can be heard in the newly-born Empress of the twelve months—the month of June.

BOOK REVIEW.

My Woodland Intimates, (The Baker & Taylor Company, New York) by Effie Bignell, author of "Mr. Chupes and Miss Jenny." Net \$1.00.

Woodland life, beautifully depicted throughout the cycle of the four seasons. The author has the keenest sympathy and closest friendship with all the animals of her grove, and her stories of their lives throughout the year are replete with interest. She introduces us to her woodland friends in the month of August, that time when most of the birds are hiding during the moulting season, and the woods are still except for the joyous carols of the goldfinch, the plaintive call of the pewee, the crude song of the newly fledged young, and the loud drumming of the harvest flies. We pass on through Fall with its hordes of departing birds and myriads of late flowers to desolate Winter with its leafless trees and birdless woods, save for the merry titmice and snowbirds.

Through the lengthening days of Spring to the time of love-making and home building, we are carried, and our interest is held in a masterful style until the last of the two hundred and forty pages have been read. Would that books such as this, and "Mr. Chupes and Miss Jenny" might find their way into the hands of all the young generation, that they might be taught to refrain from the bird killing and trapping that is now being carried on for pleasure and profit.

The Story of a Bird Lover, (The Outlook Co., New York), by William Earl Dodge Scott). Net, \$1.50.

Mr. Scott is well known to the public as a leading ornithologist, through his numerous publications and contributions to scientific and ornithological magazines. The present volume is the story of his numerous researches in various parts of the country for ornithological material and data. The first chapters are devoted to his childhood, and college days and the causes that influenced him to take up his present life work. After a few months work for a taxidermist in New York, he entered the employ of Princeton college, of which institution he is now

curator of the Museum. Besides local collection of the birds about Princeton, Mr. Scott went for material along the Atlantic Coast, several trips to Florida, the south and middle West, and the West Indies. In all of these localities, besides making additions to our knowledge of the fauna of the region, he discovered new forms which had hitherto been undescribed. The author is at present studying the living birds in captivity and has upwards of five hundred North American birds in a large Aviary. Most of these were reared by hand from the nest and are perfectly contented in the large room which allows them plenty of liberty and in which are a number of trees. It is expected that ultimately much valuable knowledge will be gained from the studying of these birds, especially as to the manner in which the moult is accomplished and as to whether a birds song is hereditary or acquired from hearing the parents. Any one who is interested in bird life will find this volume filled from cover to cover with valuable material from the pen of the gifted author. As many of the incidents are as they occurred over a dozen years ago, they serve more forcibly to present the need of each one doing his best to prevent the continued wholesale slaughter of our native birds.

The Bird Calendar, (R. H. Russell, New York.)

One of the most unique calendars ever offered to the public. It contains quotations of verse for every day in the year, and is illustrated by nine plates of birds, from drawings, by the three color process. The calendar is a gem except for the colored plates which are very crude and unlikelike, and will probably detract a great deal from an otherwise large sale.

ANSWERS TO CORRESPONDENTS.

Mr. G. H. Abbot: The common partridge of New Hampshire is the Ruffed Grouse.

A. B. Keeler, Jr.: "I enclose a photo of a bird's nest taken on the 27th of March of this year. The nest was on the ground in a small bunch of grass. It contained two eggs when discovered on the 23rd. On the 25th it had three, and on the 27th I took this picture. I was going to get some pictures of the young, but on the 31st the eggs were missing and the birds were gone." Without doubt the eggs shown in the photo are those of the Song Sparrow, although I have never heard of their building in March even in Illinois. You should have placed the camera lower so as to get a more lateral view of the nest, and you should use a stop at least as small as f64 in order to get complete detail of the whole nest.

A. B. Hall, Photographs for our competition may be on any paper except blue prints, and they can be of any size, but 4x5 or larger are preferred. Photographs made last year may be entered if they have not already been published.

UNUSUAL ROBIN SITES.

Although nearly all birds will sometimes build their homes in strange places, Robins seem to err most frequently in this respect. Perhaps it is because they are more common and we notice the unusual nests sooner than those of most other birds or perhaps the Robins themselves are not quite as keen witted as the majority of the song birds.

The authenticity of the following location is vouched for by Mr. N. A. Pool of Howell, Mich. "A nest of Robins in a milk wagon that is used every day may seem a strange incident, but it is, nevertheless true. Mr. Carpenter has a light wagon which is used every day to bring milk. In the morning it is driven over a mile after the milk and

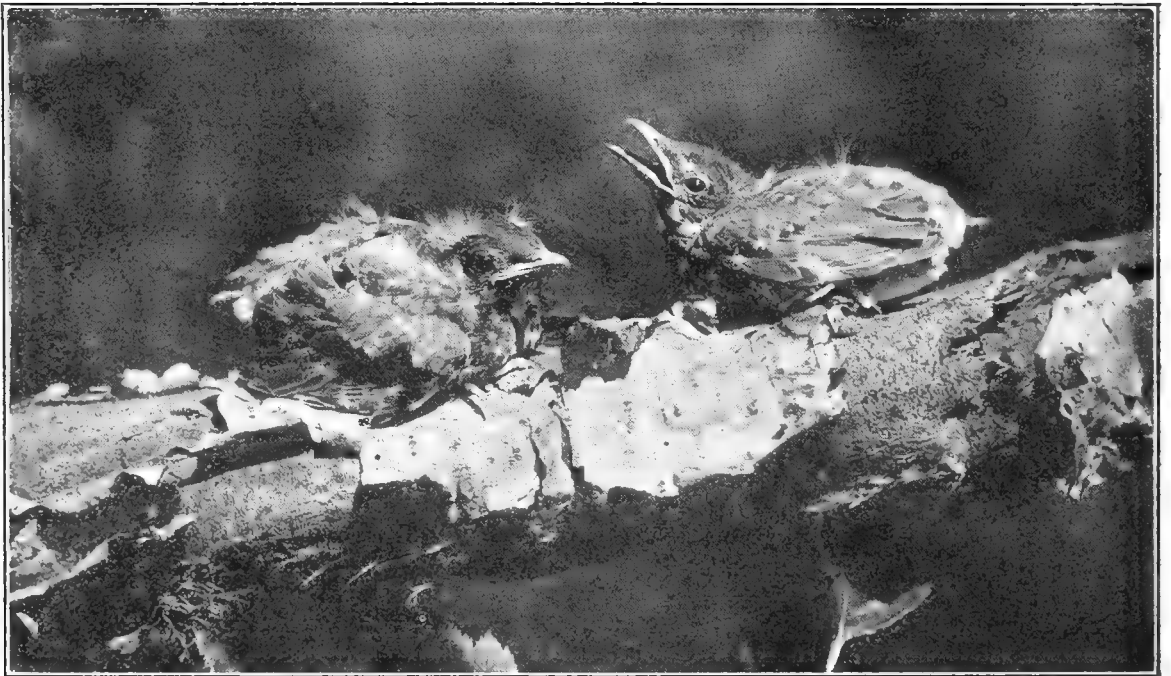


Fig. 1.

YOUNG ROBINS.

Photo by C. A. Reed.

then returns and stands under the shade of a tree the rest of the time. A Robin built her nest on the reach just forward of the rear wheels of the wagon, and under the box. In this she has laid and hatched her eggs. When the wagon is away the parent birds chirp in the trees and when it returns they attend to their affairs as though no interruption had ever occurred. It is indeed curious that they should persist in building the nest when they found that the wagon was in daily use."

Another Robin chose her nesting site where it was immovable but for other reasons would appear to be fully as undesirable as one that took a ride off every morning. This was on one of the girders of an oil cloth factory. The Robin found an entrance through a broken win-

dow pane and constructed her nest directly opposite on the beam. As the factory was in full operation all the time it would seem as though it would be the last place she would wish to choose for a home even though she had the courage to venture in there in the first place. Although the noise of the machinery is deafening, she appeared to pay no attention to it.

Owing to the poor light the photographer was obliged to use a time exposure and was extremely fortunate to get so good a picture of the old bird. The eagerness of the young may be plainly seen from blurred appearance caused by their waving heads. You can also see in front of the Robin's chin a faint impression of her head showing her attitude

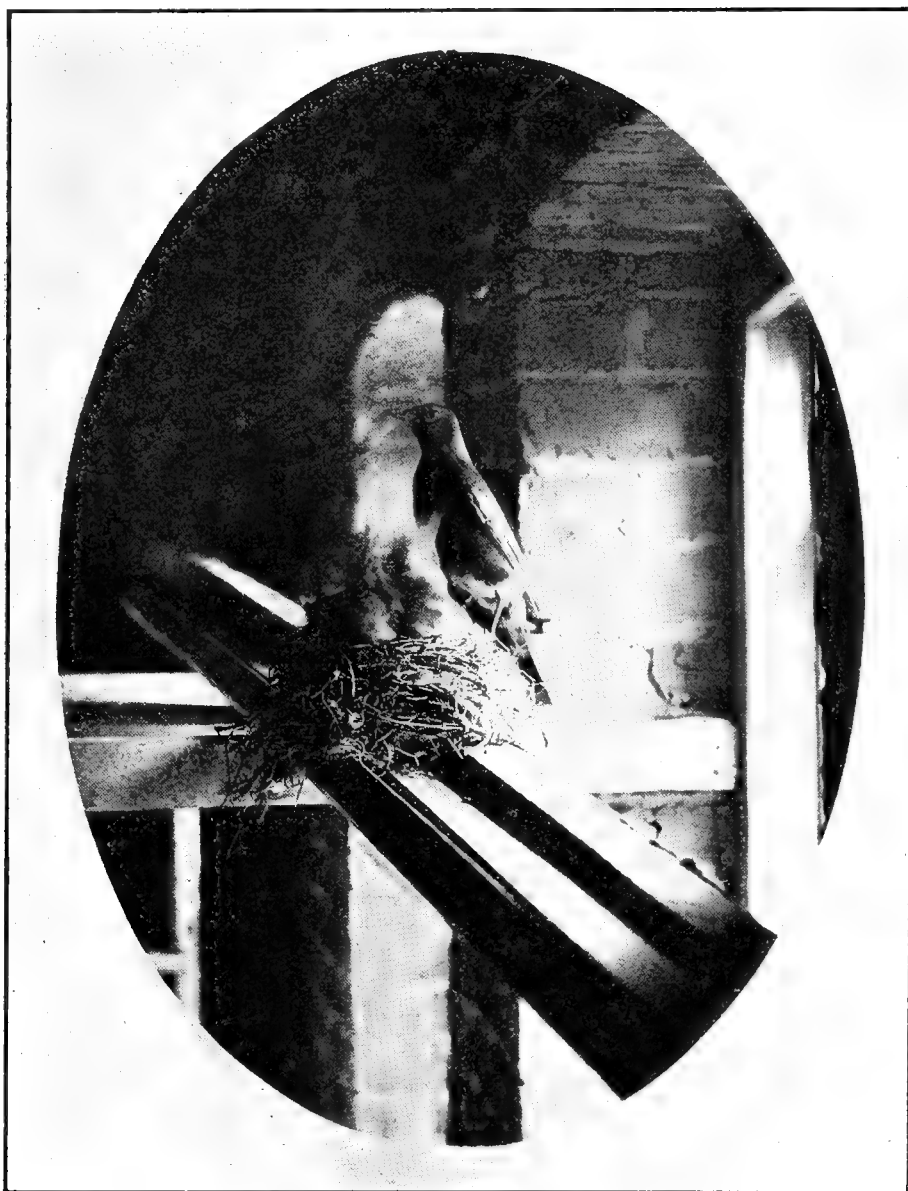


Fig. 2.

A NOISY SITUATION.

Photo. from life.

of inspection at the instant the bulb was pressed. As soon as she heard the click of the opening shutter, she quickly raised her head to the position that is clearly shown.

Another Robin has built her nest for three consecutive years on the top of a blind, under the front piazza of a house that is practically in the heart of a city of a hundred and twenty-five thousand inhabitants. She chose the window nearest the front door. The first year the nest was located on the top of the blind that was nearest the door, but for the last two years she has chosen the farther one. She chose this location and held to it in spite of the fact that a good deal of the time some one was sitting on the piazza directly under the nest, or children were playing about the house.

She soon came to know those who lived in the house and paid no attention to them when they sat below watching her, but with strangers she was more wary and would watch them for a long while before returning to the nest. I first made the acquaintance of these birds on the day that the young left the nest. A warning came over the telephone the evening previous that the young were showing signs of uneasiness and stretching their wings as though wondering whether they were strong enough to support them in the air. When I appeared the next morning one of the young had already left the nest, and when I pointed the camera in the direction of the nest, another also took wing and under the skillful guidance and encour-

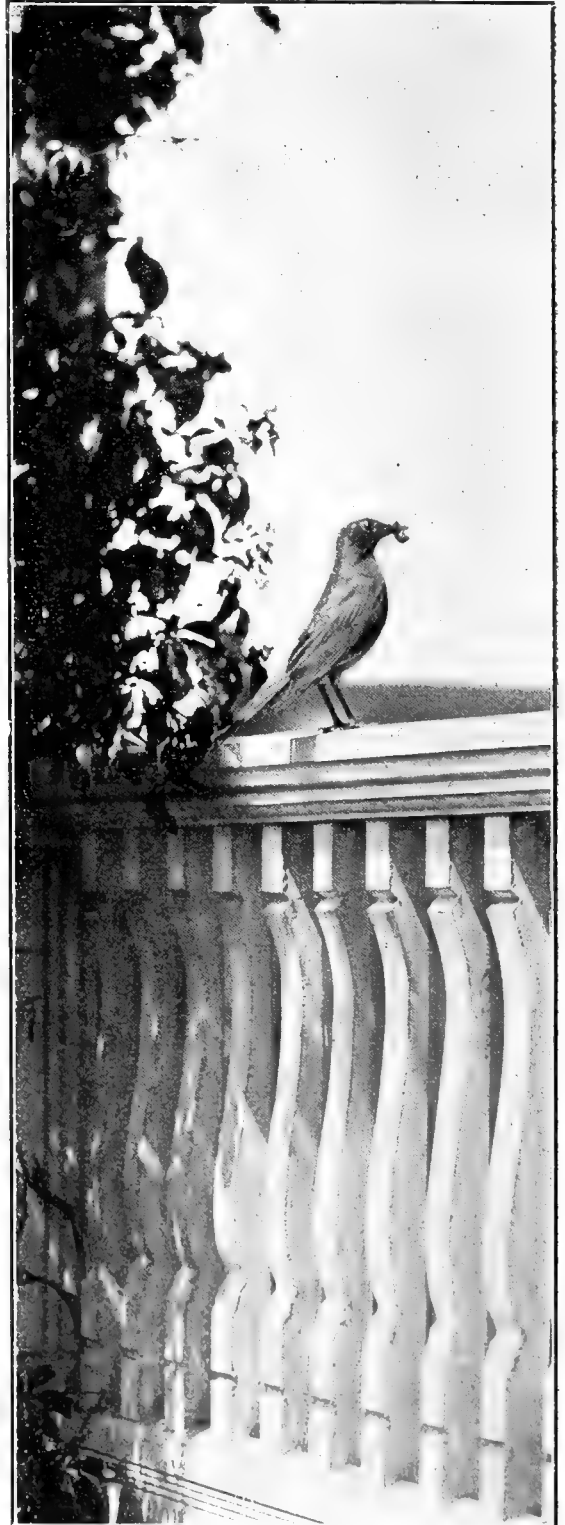


Fig. 3.

aging chirps of his mother he succeeded in turning the corner of the house and reaching an oak about fifty feet away. As is usual when each young Robin leaves the nest, there was a loud clamor for several minutes from both the parents assisted by another pair who had a nest a short distance away.

The profusion of green woodbine which adorned the piazza, tended to make quick photography almost impossible, and the old bird was so active whenever she came to the nest that a snap shot was necessary in order to get her at all.

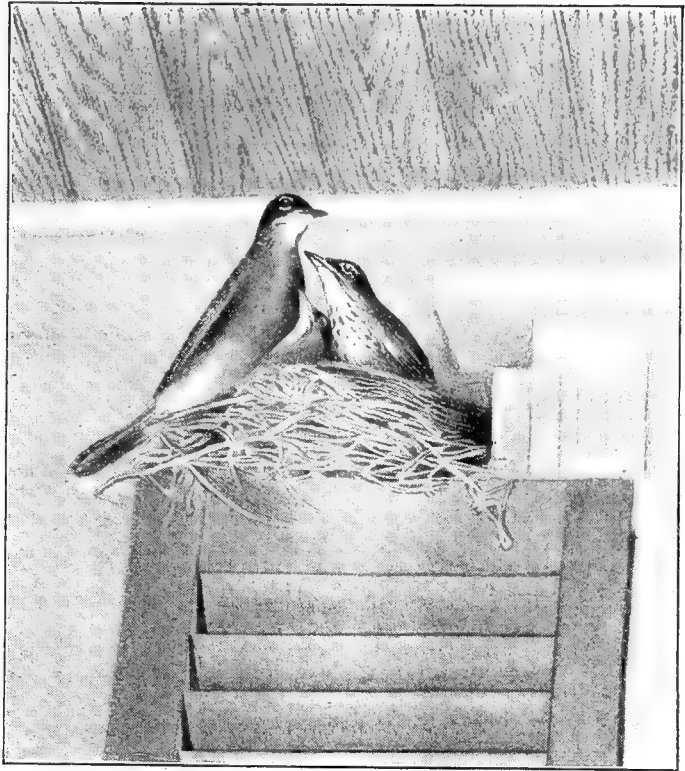


Fig. 4.

Fig. 4 shows the mother bird as she appeared trying to coax the larger of the two birds to make his maiden

voyage. Just after the camera clicked she succeeded and he went flopping heavily across the road to the further end of the lawn, where both parents held a long and loud session to persuade him to try and reach a more elevated position out of reach of feline enemies. The remaining little one had hatched a day later than his companions and had developed slower so that he did not leave the nest for two days more. He is shown in all his solitude in Fig. 5. No doubt he is wishing time away so that he



Fig. 5.

Photo by C. A. Reed.

THE LAST ONE.

may join his brothers who are becoming more and more proficient in the use of their wings.

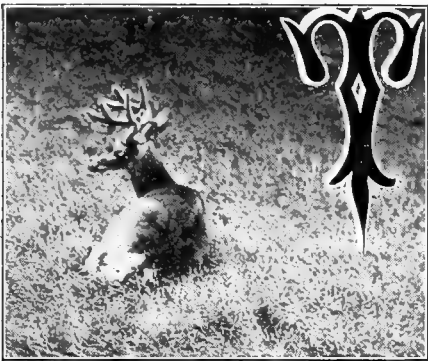
The female Robin had a marked path of approach to the nest and she hardly ever varied her route even to the fractional part of an inch. From the telephone wire, her next stop was on a hitching post in front of the house; thence to the end railing of the piazza, then to the front and lastly to the nest. She always lit in just the same places on the wire and piazza railings. Fig. 6 shows her just as she hopped to the front railing and Fig. 3 just as she is to fly up to the nest with a large worm. The diet of this lot of little ones was almost wholly one of worms and mulberries. These latter were mostly green ones, but they seemed to have no ill effects on the young birds. Before the young left the nest her only enemies were the ever present English Sparrows, who always remind me of the street-corner loafer, always looking for trouble, and generally finding it either in fights among themselves or with other birds. A number of times several of these sparrows were seen to waylay the Robin as she was bringing food to the nest, and as soon as she dropped it to defend herself, one of them would grab and make off, another instance in the long series of crimes proven against these birds, that will sooner or later cause their destruction.



Fig. 6

Photo by C. A. Reed.

A FOREST FRIEND.



HERE is nothing more beautiful in social life than true friendship. Most happy is that individual who can number among his acquaintances many that are "friends indeed." And this blessing of friendship is not limited to our own order of being. The lower animals may become our companions; and wise indeed is that person who by kindness

wins the confidence of those creatures over which he is appointed lord, and which have because of that lordship, become shy and suspecting.

I am glad that the science of Ornithology is becoming so popular, for the study of birds is a potent factor in strengthening the bond of friendship between man and the lower animals. No one can study birds



Photo from life by S. P. Brownell.

A FOREST FRIEND.

aright without becoming more tender in his treatment of them; and that tenderness will not be confined in its manifestation to the feathered tribe alone.

It was my privilege last spring so to win the confidence of a Ruffed



Photo from life by S. P. Brownell.

WATCHING MY MOVEMENTS.

Grouse as to be able to take it in my hands. But it was only after many patient attempts to approach the bird that I was permitted to accomplish this. One day last spring, while I was driving through a cedar swamp, I saw a Ruffed Grouse cross the road and run into the woods. As it seemed less wild than these birds usually are, I took my camera from the carriage, and hoping to obtain a snap-shot of it, I chased it some distance through the woods. But although the grouse did not fly, it succeeded in keeping out of the range of a camera shot. This was the beginning of my acquaintance with the Grouse, and it occurred to me at the time that one of the parties was not anxious for its continuance.

Many times afterwards I visited the same place, and found the Grouse. Each time it let me approach a little nearer than before. The smaller picture is the result of my first exposure, and this was obtained by creeping up behind an old log fence.

The bird was on the other side, and about 10 feet away. The exposure was 1-25 second. After a few more visits I was able to get within four or five feet of it, and one day while I was sitting on the ground rustling the leaves with my hand and trying to call the Grouse, it came toward me, and as I reached out my hand it pecked my finger. On one occasion I held it for some minutes in my hands, but it resented this familiarity by walking away when I had released it. However, it soon forgave me and became as friendly as ever. When I would go to the carriage it would run ahead of me, and I had to exercise the greatest care lest I stepped on it. It would also follow the wagon, running behind the wheel like a dog, until I would drive fast and leave it. If upon returning to the place where I always found it, and near which I concluded its nest was located, I did not at first find it, a few clucks in imitation of its call would bring it to my side.

These visits occurred during May and June. The last week in June I took the larger picture. Two weeks afterwards I returned but did not find it. I presume she had hatched out her brood and had started off to find food for her little family.

But I must not prolong this sketch further than to tell how I got picture No. 2. The camera, a 5 by 7, was placed on a shortened tripod. The Grouse was about two and one-half feet from the lens. She stood perfectly still watching my movements, while I focused, but as soon as I dropped the focusing cloth at my knees to put in the plate-holder, she sprang at the cloth beneath the tripod, and dealt it a few vigorous blows with her wings. Gently shoving the bird back to her position, I again focused. This time I took the precaution to leave the cloth on top of the camera. The exposure was one second. I wanted to take a full profile view that day, but my subject had either neglected to make her toilet, or else had got some balsam on her back, for a tuft of feathers stood on end. I think the bird was not responsible for her "ruffed" appearance, for I tried with my hand to smooth down the feathers, but like Hamlet's ghost they would not "down." Of course I took a great many other pictures, but these are the first and last.

I wish that I could express on paper the pleasure this short acquaintance with the Ruffed Grouse gave me, for long shall I cherish in my memory the happy hours spent beneath the cedar trees with my forest friend. And if no hunter, prowling last fall with his deadly gun, killed my gentle bird, or no wily fox carried her off for his dinner. I hope to see her again this spring.

S. P. BROWNELL, S. T. D., West Barnet, Vt.



Address communications for this department to
 MEG MERRYTHOUGHT, 156 Waterville Street,
 Waterbury, Ct.

MY DEAR YOUNG FOLKS:

With what thrills of delight every bird lover—whether beginner or veteran in bird lore—welcomes the May procession of feathered migrants. The U. S. Dep't of Agriculture sends out schedules containing seven columns to be filled with bird notes during the spring and fall migration.

Sally Orvis sends us a sample page from her note-book which shows good arrangement; the first column contains the name of the bird and the date of the arrival; the second, if male or female; the third, the song; the fourth, the call; the fifth, the habitat; the sixth, the season; the seventh, page of reference book. Something of this kind is what was meant by "Lists for 1903" in the March number. Francis Root thinks that "Ohio ought to have a chance to get to the high water mark," so he sends a list of 116 birds which he saw about Oberlin, O., in 1902. David Harrower, of Swarthmore, Pa., gives a list of 110 birds, and Richard M. Hunt reports from Winchester, Mass., 133, but his list is not confined to one year. So thus far Ohio wins the honors from Mass. by two birds only, though I am confident that our New England boys will use their eyes to such good advantage that the close of 1903 will find them again the leaders. I am sure that you will all agree that Clarence Abbott's way of studying birds is an ideal one, and would surely decide the question asked by Chas. De Garis.

Just a word as I close about your letters. We receive many which are extremely interesting, but which are so long that we cannot find space in our pages for them. It is pleasing to know that such a company of boys and girls all over our country are enjoying the birds and AMERICAN ORNITHOLOGY. Cordially your friend,

MEG MERRYTHOUGHT.

ANSWERS. TO APRIL PUZZLES.

Enigma No. 1. Scarlet Tanager. No. 2. Grackle. A Spring Enigma, Bluebird, Robin. Birds who tell their names. No. 1. Chickadee. No. 2. Bob White. No. 3. Peabody Bird (White-throated Sparrow.)

 ROLL OF HONOR.

Gerald B. Thomas, Livermore, Iowa. Chas. H. Rogers, New York City. Chas. De Garis, Hannibal, Mo. Sally W. Orvis, Manchester, Vt. Harold Moore, Newtonville, Mass. Clair McMorran, Spokane, Wash. Eunice Joslyn, Webster, Mass. Louise Jordan, Defiance, Ohio. Francis Root, Oberlin, Ohio. Stafford Francis, Exeter, N. H. R. B. Crispell, Kingston, N. Y.

 THE COMING OF THE BIRDS.

You may be interested to compare the dates of the arrival of a few of the birds at their summer homes as reported by some of our lads in various parts of the country. Lewis Drury reports the appearance of the bluebirds March 4th, robins the 5th at Rutland, Vt. S. B. Covert, the meadow lark at Plymouth, on March 8th, (earlier than ever known in that vicinity.) Chas. Rogers, N. Y. city, crow blackbirds, March 10th, fox sparrows, March 5th, brown creeper, March 9th. Stafford Francis, Exeter, N. H., March 5th, the juncos, 6th, robins and bluebirds, 10th, song sparrows, 12th, red-winged blackbirds, 13th, blackbirds, 17th, phoebe, 24th, meadow lark. Chas. Abbott, Antrim, N. H., March 20th, Phoebe and Song Sparrow.

 FROM OUR MAIL BAG.

There is a question which I wish to ask. Is anyone nowadays justified in shooting birds to make collections? I began by doing so but it seemed so unnecessary in this advanced age when so many fine collections have already been made, and when almost any one can get a good pair of field glasses at little expense. It seems that all of our American Ornithologists have begun in that way, but maybe they did not have glasses and text books as we have today.

CHAS. DEGARIS, Hannibal, Mo.

My brother and I were walking through a field looking for nests. All of a sudden we saw a field sparrow fly up with food in its bill. We hid in the bushes and watched. We saw she went down in a clump of bushes. We then got up and went over to the spot, but saw nothing,

so we hid again. She went down in the same clump again. We went over and found the nest. It contained three young, and very young they were too, for they didn't have their eyes open even. My brother got his camera and tried to photograph the mother bird brooding, which he did after a good deal of trouble. When the young birds grew older we tried to take the mother feeding them out on a branch, which we also did after a good deal of patience. After awhile the parent birds found out that we didn't harm their young and became very tame.

My brother even thought of putting the young on a twig, and holding it in his hand, to see if the mother would feed them. We were delighted to find that she would after a great deal of patient waiting. We now thought we could even get her on our hands by the same means. We hid ourselves with just our hands sticking out. After about an hour the bird began hopping nearer, till at last she actually hopped on my brother's hand. We had accomplished what we wanted to do. Afterwards the birds fed their young on my brother's shoulder when he was sitting out in full view. The above story is perfectly true.

CLARENCE C. ABBOTT, (aged 10) New York City.

I am not young, but I have to record the arrival of the Meadow Lark on the 8th day of March, earlier than was ever seen in this locality. You see we were not sure about the ground hog, for the day was mostly cloudy, but the sun shone out bright about mid-day. We have had rain and even thunder, but the wise ones shook their heads saying, "Oh we will have cold weather yet." Then came the robin, but some felt sorry for it. "Surely we will have cold weather yet." Then some black dirt in the greenhouse showed signs of life and the wooly leaves of the hepatica made their appearance, and a fern frond rolled up. I said "spring is coming, is here now." This morning while at work a familiar note caught my ear, I said "listen that is the Meadow Lark." And there he was on the top of a tall tree instead of on the ground. Of course others will be ahead of me, and I, Oh, well, it is such a sweet sad song, fitting for a Sabbath morn and I wanted to tell somebody. Pardon my entrance and I will go.

S. B. COVERT, Plymouth.

(A YOUNG WOODCOCK.)

Making my way through a large belt of trees I came to an open field. A creek ran through this field, and its banks were covered with willows. Some farmer had cut down some of these willows and piled them into brush heaps. Sumac trees grew abundantly near these heaps and the grass evidently never been cut. I was walking past one of the small ones and keeping a lookout for birds nests, when all of a sudden

a large bird went whirring up in front of me. She rose straight for about twenty feet and then flew off for the creek. Four little downy birds resembling chickens, but smaller, were making for a neighboring hedge. I picked up one who was amongst the leaders and examined him. He was covered with greyish down and had three black stripes extending from the bill to the lower part of the back, or to where the tail ought to have been. The eyes were far back in the head and were yellow with a black iris. The legs were greyish. I wanted to take it home but it cried so sadly and pitifully that I put it down and continued on my way.

CHAS. P. ALEXANDER, Gloversville, N. Y.

Today I saw a Brown Creeper, only about three feet above my head, take a dark red caterpillar about an inch and a quarter long, and, while clinging head down, hammer it against the trunk of a tree a number of times, and afterward swallow it.

CHAS. H. ROGERS, New York city.

I hung out a strawberry basket, suspended by twine from a branch like a hanging pot, and then I climbed up and put in a piece of suet, some bread crumbs and a little tin full of water. I have seen Chickadees, Bluebirds and Woodpeckers at it.

STAFFORD FRANCIS, Exeter, N. H.

The little Marsh Wren might be called a sentinel for the larger birds of the swamp. When going around the swamps in my boat if I should row too near the reeds where there was a larger bird that might not see me, the wren would give a sharp little note, and then the other bird would fly away. I also noticed that some of the wrens would build their nests with two doors, because when I stuck my finger in one hole they would fly out of the other, and give me the slip.

LOTHROP LEE BROWN, Evanston, Ills.

AN ENIGMA.

The 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 is an inhabitant of our woods even in the cold winter. One may often 10, 3, 15, him 11, 13, 1, 13 in a 5, 12, 3, 15, looking for his 10, 11, 9 prey, which he will 5, 2, 9 to 10, 5, 2, 13, 14, 15 with his bill. Sometimes out of 10, 13, 6, 11, 5 he sings a 1, 4, 9, song, 5, 8, 14, 3, 10 a sudden flight and 10, 13, 5, 10 his victim which is sometimes as large an animal as 7, 3, 5.

HATTA WASHBURN, Goodwin, S. D.

There are two birds which stay with us through the year, whose names together contain 30 letters. The first name from (1 to 21.) The first bird resembles 6, 3, 7, 13 of another and lower order, in that he climbs 4, 7, 8, 5, 10. No other 6, 3, 7, 13 has his 2, 9, 6, 24, 19 of going down trees 2, 31, 27, 28 first 2, 29 does not 15, 10, 29, his tail to

6, 7, 27, 22, 30 himself up 6, 15, 11 digs his strong claws into the 6, 18, 7, 23 of the 19, 7, 12, 29. The second is more common, and the great poet Emerson, has 1, 7, 3, 4, 4, 12, 14 a poem about it. It does not say 20, 17, 12, 29, 25, 21, 29, 12 as do so many other birds, but has its own notes beginning with 22, 53, 24, 25, 26, 27, 28, 29, 30, 28, 29, 30, 28, 29, 30.

BIRDS THAT TELL THEIR OWN NAMES. (continued)

When summer comes we have several more birds who call their own names and three of these are members of the flycatcher family. One No. 4, comes from the south long before the leaves are out, and though he jerks out his name in a not very musical fashion—it is a girl's name too—we are always glad to hear it again. This bird builds under the eaves of low buildings, or perhaps on a beam in some old shed, sometimes even under a bridge, and has for a nest a whole handful of moss and mud, just enough of the mud to hold the nest together, and to stick it firmly to the stone or wood on which it is built. You may easily mistake this bird for our next, No. 5, for both are flycatchers, they are about the same size, (number 5 a little smaller) and their colors are very much alike, but their calls are quite different. No. 4, bursts out with his so eagerly that his whole body and tail twitch at the same time, but No. 5, speaks more slowly and with a decidedly mournful note. Besides, No. 4, is usually found in the open country near a pond or stream, while No. 5, likes the woods or sometimes lawns where there are plenty of trees. Then, too, No. 5, has two distinct whitish bars on his dark wings, while No. 4, has hardly enough wing-bars to notice; but if they are speaking you can easily tell which is which.

ISABELLA MCC. LEMMON, Englewood, N. J.

GLEANINGS.

The maple puts her corals on in May,
 While loitering frosts about the lowlands cling,
 To be in tune with what the robins sing
 Plastering new log huts mid her branches grey.

LOWELL.

THE BUSH SPARROW.

The song makes me think of a silver thread running through a woof
 of golden sunshine, carried forward by a swinging shuttle of pearl.

LEANDER KEYSER.

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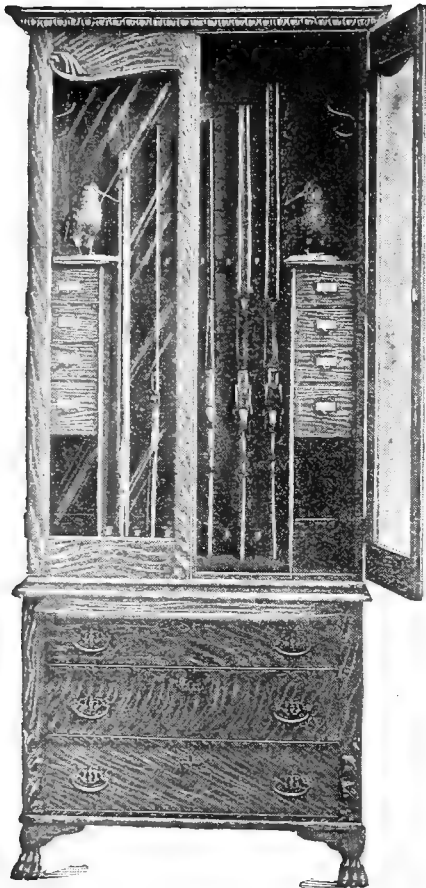
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| 6 Ruffed Grouse on Nest. | 31 Five Young Chickadees. |
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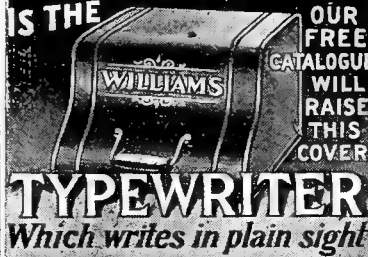
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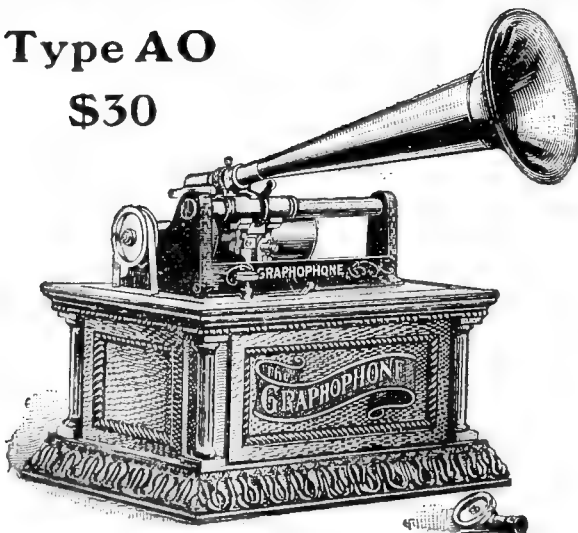
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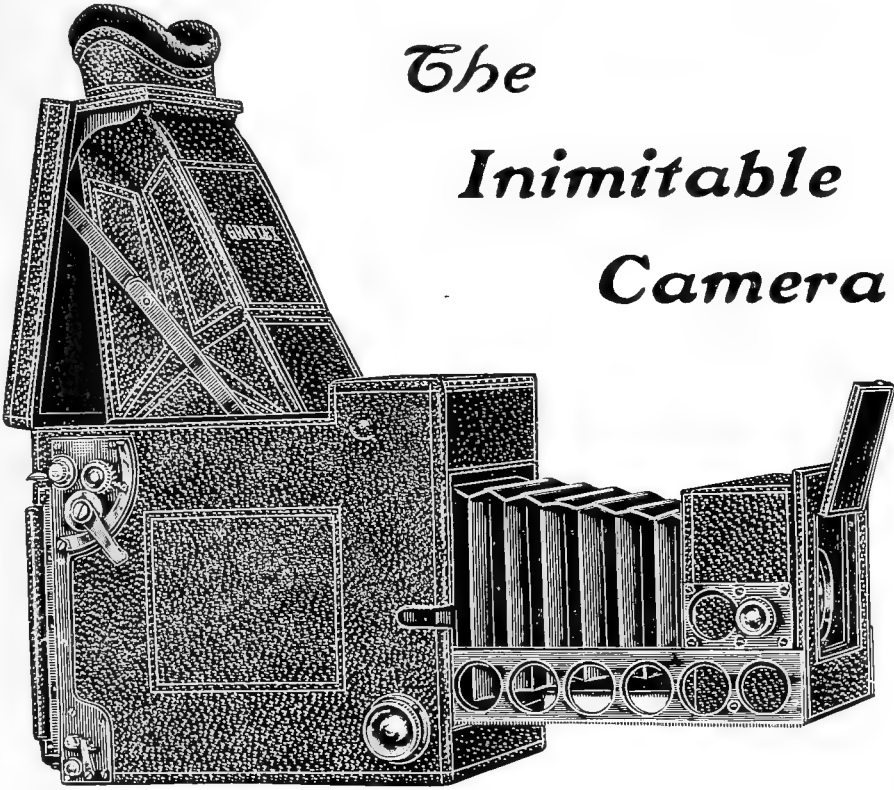
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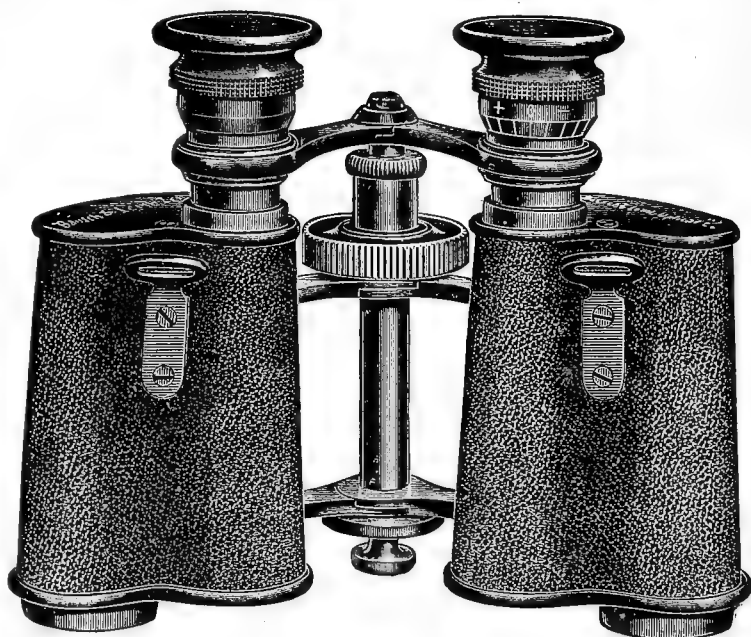
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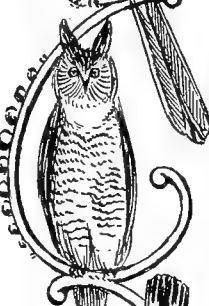
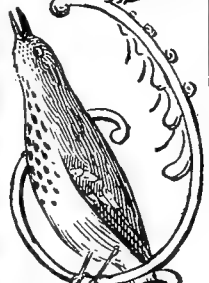
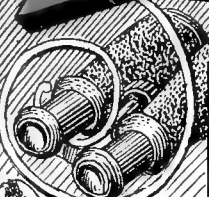
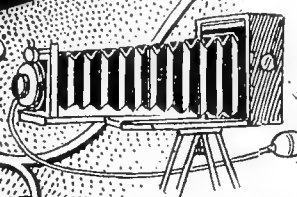
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VOL. III

JUNE, 1903.

NO. 6

This month marks the height of the nesting period of birds. Nearly all birds that rear but one brood a year, are engaged in caring for their young during the month of June. Doubtless many of our readers will brave the heat to find out new things about the birds in their locality. We are always glad to publish authentic notes and our other readers will be pleased to know what you have seen.

Camerists have commenced work and we have already received some very good bird photographs. If any of our readers are thinking of getting a new camera and want the best, I can take pleasure in recommending the Graflex. I have made very complete tests with this camera and have found it perfect for all classes of work. It is quite an expensive camera, but if perfect results at all times, are any object, this is the camera that you need. This camera is advertised elsewhere in this issue, and the same company also make a complete line of ordinary camera.

HAIL TO THE BIRDS.

Far among the mountains, steep and rugged,
The wild birds in seclusion dwell;
In the dark and lonely forests,
By roaring torrent, in rocky dell.

Sailing o'er ocean's mighty billows,
With a beautiful grace we cannot express;
O'er the dark and troubled waters,
Touching the waves with a fond caress.

Among the snow-capped cliffs and ice-bergs,
On northern sea coast, bleak and bare;
In all the world's remotest corners,
They never fail us, the birds are there.

Homeward from sunny southland,
The migrants bear tidings of spring;
Swiftly o'er the aerial pathway,
With flight unerring, and tireless wing.

The merry birds are up and doing,
With the first gray light of morning's dawn;
Through the woodlands, o'er the meadows,
Singing songs of gladness all day long.

Down from lofty tree-top perches,
And from lowly wayside, far and near;
Come sweet echoes of their music,
Throughout the long and changing year.

Protect their haunts, guard well their homes,
They claim our help and fostering care;
In our life work we shall need them,
Increase their numbers everywhere.

Always with us, they charm and cheer us,
Warbling thanksgiving at close of day;
In sunshine and shadow, tempest and calm,
God's messengers of love, are they.

BERTON MERCER.

SCREECH OWLS.

BY EDWARD HOWE FORBUSH.

The bird of night! The bird of mystery! The bird of Fate! From ancient times such dismal appellations have been bestowed upon the owl. Some savage peoples still look upon the bird as a personification of the evil spirit and dread to encounter it. It must be admitted that the grotesque appearance of the owl, its staring eyes, its hollow cries, and its power of flying rapidly and noiselessly from place to place unseen in the darkness, all tend to make it the object of superstitious dread and the subject of fearful traditions; but modern scientific investigation has shown it to be not only harmless but one of the most useful of our feathered friends.

Still there is very little known of the night habits of the owls. The mystery of darkness yet enshrouds them and those who desire an insight into the owl life must themselves become practiced night prowlers. He who wishes to watch the owls must be in the orchard, wood or meadow in the sunset's afterglow, for one can see little when black night has fallen, though something may be done under the full moon, or at early dawn. You may first locate the owl haunt or nesting place, by the droppings, or little balls or wads of fur, bones and other indigestible material which the owls cast up and carelessly leave upon the ground near their roosting places. Or by searching you may find the nest in daylight. At mating time you may locate the owls by their cries and he who then prowls about after sunset using his senses to the utmost will soon find what he seeks. You may find owls in the daytime by investigating the cause of sundry noisy gatherings of crows or jays, but for the best chance to make or renew owl acquaintance, give me the still night vigil. When camped on shore or marsh in a little brown shelter tent just large enough to furnish concealment, I have enjoyed the best of opportunities for watching owls.

Camping in a marsh suggests rheumatism or malaria, but I know from experience that one may camp on a mud bank in the center of a great swamp without experiencing any serious inconvenience. In a marsh among the Thousand Islands, Florida, Short-eared Owls could be seen in the moonlight quartering the ground in short sweeps hunting for mice or insects. While camped on an island in the Gulf of Georgia I was often visited by a small Screech Owl which at times alighted on the tent. It is not necessary, however, to go far from home to see the Screech Owl alive in its chosen retreat. Let us go then to a spot, not far away, where we may find an owl's nest. On the south side of a sunny hill pasture a spring wells up from the cool earth

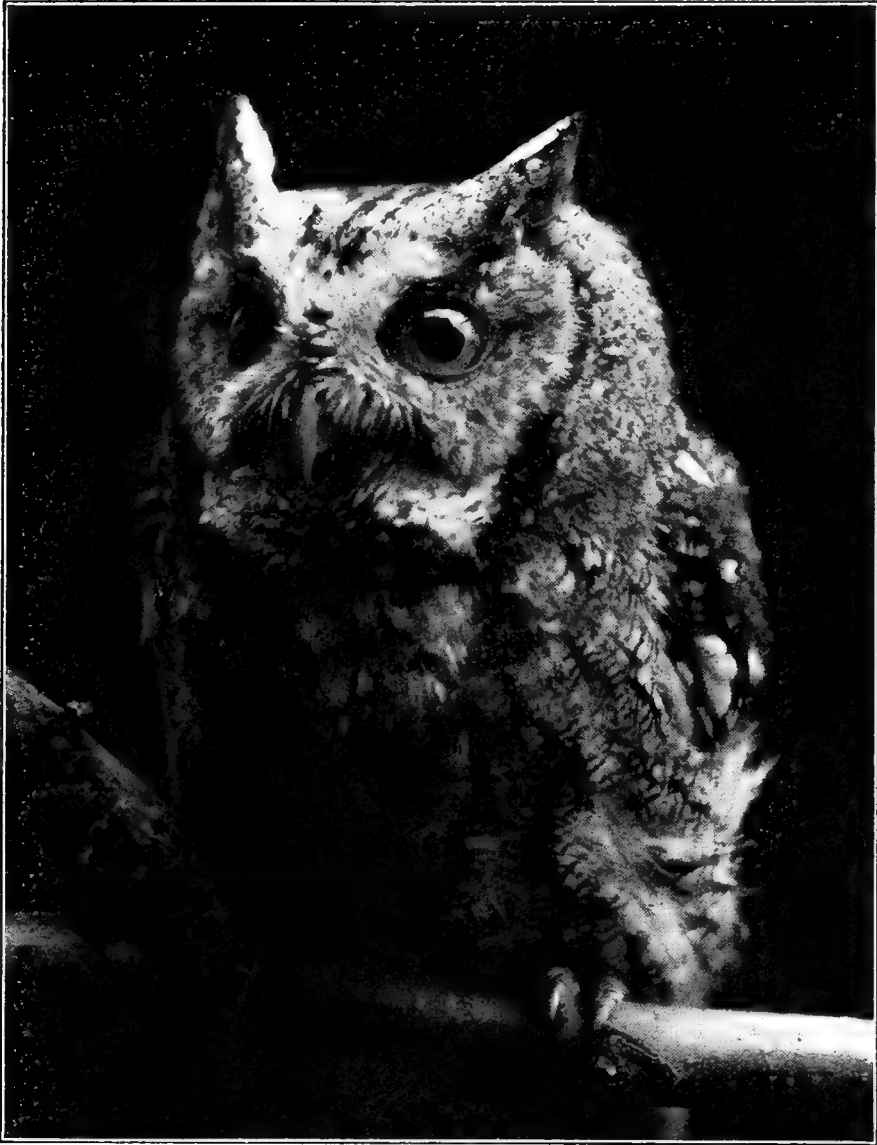


Photo from life by C. A. Smith.

FATHER OWL, THE GRAY BEARD.

filling an old wooden trough at the foot of a lane where cattle come to drink and browse. Here grass greens earliest in the spring. The outflowing rivulet wanders along the hill foot, becoming by the influx of other streamlets, a noisy brook fuming and foaming along its stony bed. Just before it enters the wide green meadows an old orchard occupies the rise on the hither side. It is walled up by an ancient and moss-grown stone fence and may be entered through barways of weather beaten cedar. The old trees still show some vigor, but the trunks and branches are seamed and pierced with cracks and cavities caused by decay resulting from old wounds. Here and there the bark bears the ring dottings of the smaller woodpeckers. Bare dead branches show the perforations of the Flicker.

The slope from orchard to brookside is covered by a scattering growth of tall sapling maples and birches. This copse terminates in a thicket of alders at the bank. Smooth upland mowing land rolls south from the orchard to the farm house nestling among its great elms at the roadside. To the west lies a small swampy thicket and beyond this a belt of large chestnut timber and another high, barren, rocky pasture. "But" you ask "why take up time with all this description? this filling?" Well, I am taking you to a locality fitted by man and nature as a dwelling place for the Screech Owl and I wish you to recognize such a spot when you reach it. The old hollow apple trees will furnish our bird with a hiding place during the day, or a nest in which to rear its young. The meadow and fields will furnish their tribute of field mice and other small game. The woodland and the swampy thickets harbor birds, small four-footed creatures and large night-flying insects which may be readily captured by the owl as it hunts along the borders; and even the rocky upland pastures and fields will furnish some grasshoppers and crickets for the owl's larder. The brook with its frogs and fishes will also serve a purpose, for our owl when driven by necessity, becomes an expert fisher. Whether the owls have reasoned that this spot will furnish plentifully their larder or whether the hollow trees alone attracted them, I leave it for the reader to conjecture, for he that can fathom the working of an owl's mind is wiser than the owl.

While we are talking the shadows lengthen and the even-song of the Wood Thrush, the Robin and the Veery remind us that the owl day is about to begin. A half hour's walk brings us to the old barway and as the sun disappears behind the distant tree tops we stand beneath the apple trees. Already the air grows cool with the chill of night; the evening dews are falling; in silence the darkness comes. Suddenly you are startled by a sharp snap twice repeated and coming apparently out of

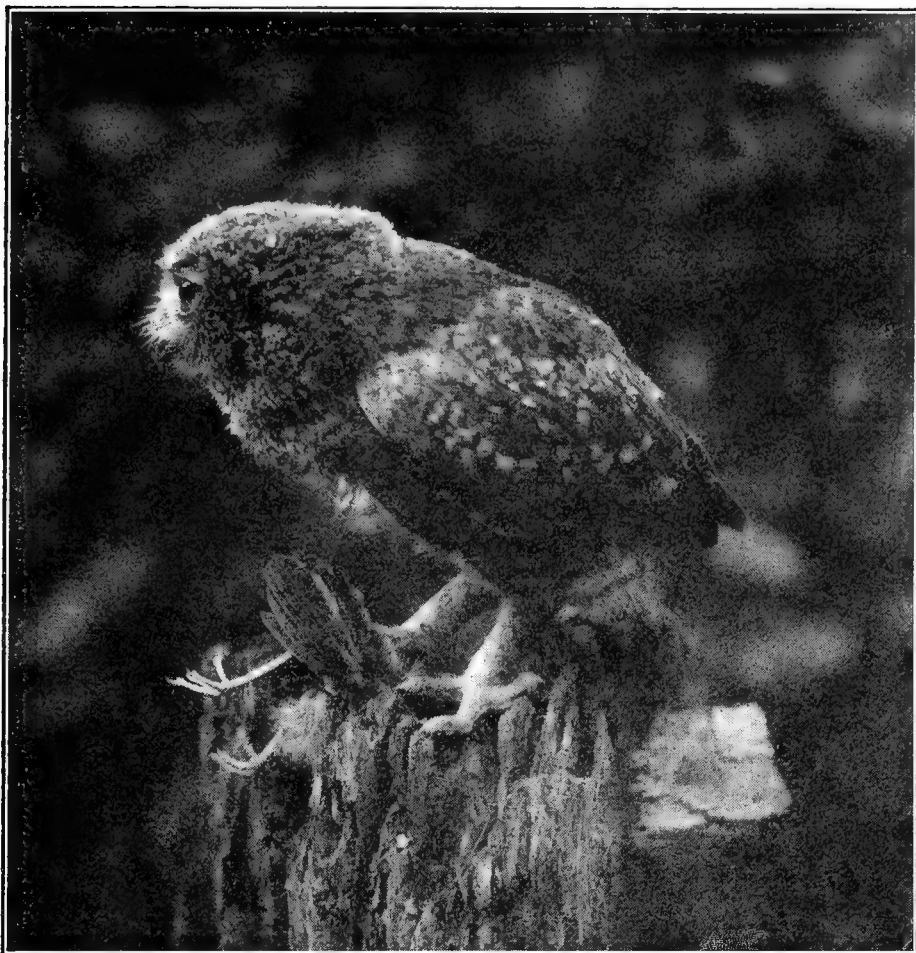


Photo from life by C. A. Smith.

MEAL TIME. (Five weeks old.)

the air at your back. Quickly you turn but there is nothing in sight that could have produced the strange sound. It seems to have come from empty air. Again the sound is repeated. It is as clear and distinct as the snap of a watch case. Alert now, you wheel to the sound so quickly that you catch a glimpse of a bird retreating rapidly in sidelong—noiseless flight among the overhanging branches. You have seen, for the first time, the Screech Owl on its "native heath." Now take your stand so that the old hollow tree to which it flew shall come between you and the glow still lingering in the western sky. Soon the bird comes again, swinging behind you in a half circle, snapping its beak close to your head and retreating as before. Now its mate appears and together, or alternately, they dash back and forth, menacingly snapping their beaks and apparently trying to drive you away from the spot. They are unable to intimidate you thus, and retiring at last to the branches, they set up a quavering whining cry. This note has in it the quality of a puppy's whine and somewhat resembles the cry of a young raccoon.



Photo from life by C. A. Smith.

THERE'S A HAWK IN THE SKY.

(Six weeks old.)

As darkness renders observation difficult we leave the birds unmolested, but if we return tomorrow afternoon we may find the owl's nest in a hollow limb of the old apple tree. You may then put in your hand and draw out one of the sleepy parents who appears as if stupefied. In the nest are three little downy white owl chicks, with a dead mouse lying by them all ready for the evening meal. Now if you replace the parent bird in the nest and come again at sunset you may be able to observe the owls closely, but their anxiety for their young will probably prevent them from hunting in your presence. At dusk they fly from tree to tree, standing motionless and staring between whiles. You have already noticed that one is red and the other gray, and are wondering which is the mother and which the father bird, but this variation of color has no relation to sex or age. The Screech Owl is a bird of two colors. It is merely a case of dichromatism for which we cannot account.

As the gray bird alights on a limb and faces the western sky, the dying light illuminates its breast making its front appear like the face of an old man with a long gray beard and staring yellow eyes, but with horns growing from the forehead. The effect of the illusion is rather startling. The streaks upon either side of the breast, tending toward a point near the centre, outline the beard which gives the bird a venerable appearance. This illusion is perfect only when the bird faces you in the half light of early evening with both head and breast to the front. The lines indicating the beard may be seen in the accompanying illustration of an adult bird in gray plumage, page 197, but the effect is not visible as the breast is in shadow and the head slightly turned. Now that we have found the young owls it will be interesting to watch their growth. They are covered with down, at first, like a young chicken but are not able to run about or shift for themselves. On the contrary they are quite feeble. At first they grow slowly but as the days go on and the coat of down is replaced by one of feathers the little birds increase rapidly in size and strength until some evening you will find the nest empty and the comical little fellows will be found perhaps sitting about on the branches as shown in the group. From the time they leave the nest they are usually in company and generally the old birds are not far away. I have never known these owls to congregate in flocks larger than one family, but I am informed that a lady in Westport, Mass., some time about 1847, hearing an "awful noise" one evening, near the house, went out and found twenty-five or thirty of these owls sitting on her clothesline and the posts to which it was attached. These owls are said to have remained about the neighborhood for a month. One evening they alight-

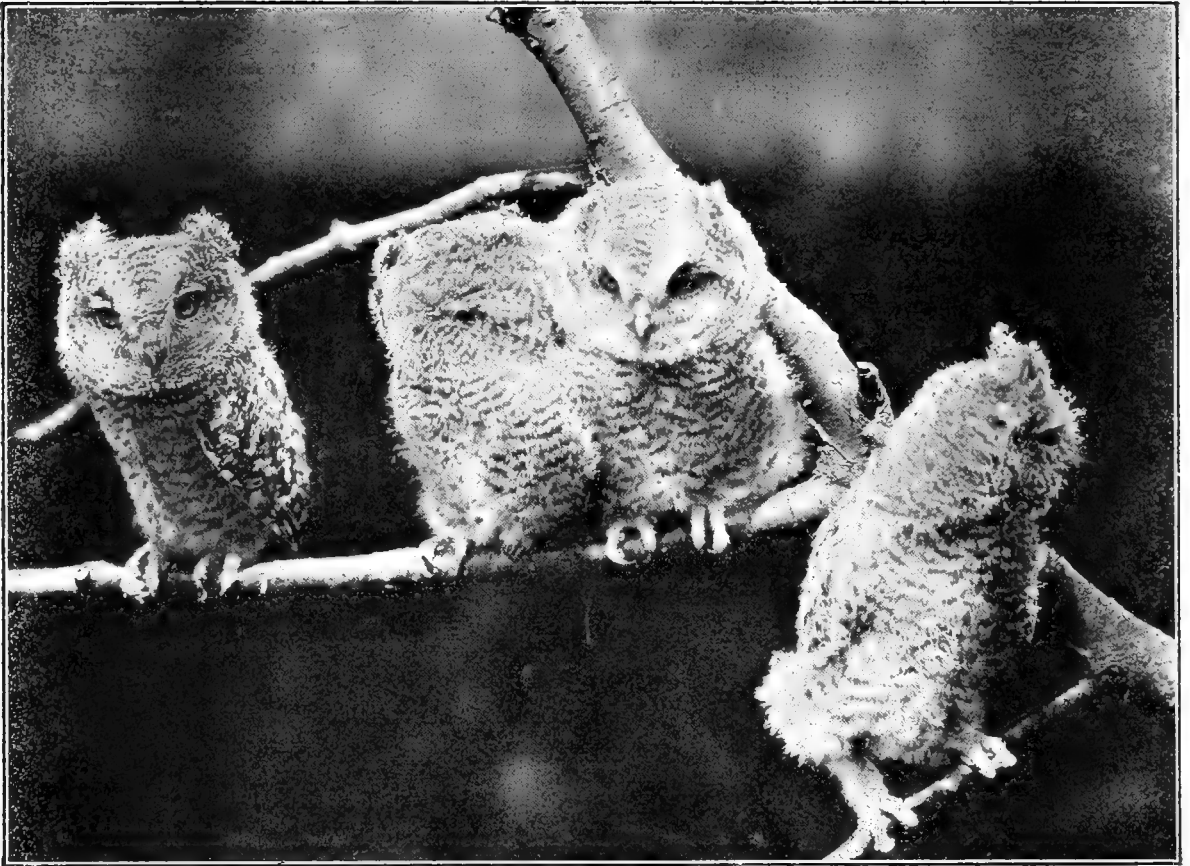


Photo from life by Dr. J. B. Pardoe.

A FAMILY GROUP. (Young Screech Owls.)

ed in the trees near a house and there made such a noise that the people came out and drove them away with stones. This statement is vouched for by Mr. F. H. Mosher and Mr. C. E. Wood corroborates it. Owls probably never congregate in this way except where they find an abundance of suitable food. They were probably attracted to that locality at that time by the increase of field mice or some destructive insect pest, for birds of prey can subsist in flocks only where animal food is very plenty. Wherever field mice unduly increase, owls flock to the feast and they are very effective in reducing the plagues of mice which occasionally occur in different parts of the world.

Young owls do not, like the saints, "grow in grace." They are rather angular and awkward creatures. They do not appear to advantage while feeding, especially when they have reached that "weedy" stage represented by the bird at the age of five weeks. The bird stands with wide spread legs regarding its prey, then crouches over it with drooping wings and bristling plumage. If by seizing its prey in its capacious beak it can swallow it bodily the meal is soon finished and this rapid manner of disposing of its food seems to satisfy the owl's sense of fitness.

Owls though useful are unprincipled and while they feed almost wholly on creatures that are inimical to the farmer, they do not hesitate to kill other birds when they can get their claws upon them. I have known a Screech Owl to enter the nest of a Flicker, kill the occupant and after taking full possession of the domicile make its first meal on the former owner. I once found all the prominent features of a Long-eared Owl immersed in the gastronomic interior of a Barred Owl. I once confined several owls in the same room. One night the larger part of a Screech Owl disappeared down the gullet of its companion, and it was not long before the largest bird, a Barred Owl, represented in itself the entire happy family, having disposed of the others as its superior taste dictated.

The generally accepted belief that owls cannot see in the daytime is an error. They are enabled, by contracting the pupils, of the eyes to see remarkably well by daylight, although when suddenly exposed to a blinding sun glare, by being drawn forth from a dark hiding place, most owls will appear blinded or dazed. The Hawk Owl and Snowy Owl hunt by day. No doubt both of these birds hunt also at night as they are arctic or subarctic fowls. The Great Horned Owl and Barred Owl frequently move about in the daytime when they are often difficult to approach.

Some twenty years ago, when the Worcester Natural History Society had a museum on Foster Street, Prof. F. G. Sanborn kept in the museum a live Screech Owl. Little "Scops" as it was called was at first very drowsy in the daytime, but, as its day dreams were frequently interrupted by visitors, it soon learned to sleep at night and was always wide awake during the hours when the museum was kept open to the public. In the fall, when the hawks were migrating, this little owl was allowed to stand in a window whence it might watch all that was going on in the street. My attention was soon called to the curious antics of the bird which stood much in the same position of the owl pictured on page 200 watching, not the street below, but the sky above. It stood there in an attitude of apprehension, its head slowly gyrating or rolling about and its eyes fixed on the blue and cloudless sky. No one present could make out the object of its fear until one at last descried a large hawk (probably a red tail) swinging in great circles at such an immense height as to be invisible to most of those present. After that, it was noticed that whenever the owl assumed that attitude and expression a hawk was passing overhead. This was proof positive that the owl could see by daylight as well as the best of us.

At seven weeks old our owl shows that he is rapidly approaching maturity. The wing quills have grown and lengthened immensely and

the bird is now ready for a somewhat extended flight. Mark its firm and vigorous grasp of the branch, a sure indication of power. Note the grave, intelligent, self-possessed look with which in broad daylight it greets our approach. There is nothing unseeing about those big eyes. They seem to express more even than those of the adult bird on page 197, which has rather a dreamy and absent minded look as if it had not yet fully awakened from its daily sleep.



Photo from life by C. A. Smith.

SEVEN WEEKS OLD AND READY FOR BUSINESS.

When we consider that owls have the power to see and fly by day it is rather remarkable that some of them appear so stupid in daylight. You may take the eggs from under a mother Screech Owl, one by one, without arousing her, though she may possibly open one eye when you abstract the last one. You may take the bird from the nest and carry it about all day in your pocket where it will remain quiet and motionless, but place the same bird back in its nest at nightfall and it awakes to active, vigorous life at once.

Owls are the cats of the bird world. Like puss they see in the dark. Like her their sense of hearing is remarkably acute. Like her they approach their prey noiselessly and pounce upon it with tremendous force. Like her they are armed with talons, but here the similarity ends, for the talons of the owl are far more powerful than those of the cat, and the owl, size considered, is much stronger than the cat. A Horned Owl has been known to strike and kill a large cat without suffering any injury from the encounter though the cat was far larger and heavier than the bird. No doubt Tom was taken unawares. This is one reason why the bird has the advantage of the mammal. Emerging in the darkness from the black shadows of the wood it sweeps along unnoticed against the dark background of the trees. Its plumage is covered with downy filaments which muffle all sound. When near its prey it swiftly descends and, extending its powerful legs and claws, strikes like a feathered thunderbolt. The powerful leg muscles backed by the weight of the bird and the force of the plunge drive the talons through the very vitals of its prey while a blow on the head from the beak stuns the wretched quarry or a wrench from the powerful claws breaks the neck, causing almost instant death. Few small mammals except perhaps some of the weasel tribe are quick enough to escape from or cope with the owl, and even these sometime fall a prey. The strength of the owl's grip is tremendous and the machinery by which it is exerted is worth a passing study. If you ever have an opportunity to examine the legs and feet of a dead owl, note the strong recurved claws and see how they close as the leg is pushed up toward the body. If you have time to dissect out the mechanism that controls the motions of the leg and foot, you will find a series of cords (represented by tendons,) and pulleys (represented by grooves or apertures in the bones of the legs,) by which the claws are expanded or closed. Not only is this effected by powerful voluntary muscles, but these are reinforced by the weight of the body, which, as the bird strikes, it bends the legs, draws the tendons through the bony pulleys and accentuates the grip of steel. When this grip is once fast to anything it takes a strong man to loosen it or even straighten the bended legs, if the bird belongs to the larger species. Lest I may be accused of drawing on my imagination for the above description of the manner in which the owl strikes his prey, I will say that on at least three different occasions owls have struck their talons into different parts of my anatomy and in each case I had a very close view of the manner of procedure, being therefore a competent but unwilling witness of the operation. I have also seen an owl strike its prey, but must admit that I was not so fully impressed as when I was a party to the argument. The mechanism by which the closed leg causes

the claws to maintain their grip is common to perching birds. It is this which enables them to maintain an involuntary hold on the roost during sleep, but it is specialized and brought to the utmost perfection in the owls.

To make the grip more perfect than in other birds, one of the three front toes on each foot is so jointed that it can be turned backward, thereby giving the owl a grip like that of the Woodpecker's, two toes before and two behind. This toe can be plunged in sidewise at will wherever it finds the least resistance. So if ever you wish to befriend an owl never offer to shake hands with him, for the grip passeth that of all secret orders.

SUMMER HOMES IN ALASKA.

BY J. ALDEN LORING, with photos by the author.

WHEN I left the head of Cook Inlet, Alaska, May 4, 1902, the days were warm, but the snow in the forest was so deep that the Indians were forced to wear snow shoes when they went on hunting trips, and in the inlet massive ice floes surged to and fro with each tide. For two days we fought these packs from a frail sloop, and on the afternoon of the third day were prevented by the ice from approaching nearer than half a mile of our destination—the Indian village of Knik.

Stepping from the boat I climbed to the top of a stranded chunk of ice, and gazed over the cheerless scene while the natives were unloading our six month's supply of provisions. It was then that I realized for the first time what an expanse of territory separated me from my New York home, and how completely alone I seemed to be. To be sure there were the Indians, plenty of them, for they had seen us approaching and had walked along the snow-covered beach to meet the pale-faced stranger and learn his business. But the faces lacked friendly expression and their jabber was unfamiliar; what I longed for was the smile or voice of a friend, and little did I dream that my yearning would so soon be gratified.

The boat had been unloaded, and the Indians shouldering sacks of flour, slabs of bacon and boxes of canned goods, were about to start for the cluster of log cabins, when a familiar voice called to me. A voice that I knew almost as well as that of my mother; a voice that in my infancy had many times lulled me to sleep, and equally as often awakened me at morn. It was dear old Robin Redbreast. I could not have been more startled had he spoken my name, and I wanted to hug him for joy. How I wished that he could talk; that he might tell me of his journey, and how he had left my friends at home.

The Indians noticed my enthusiasm, and gathering in little knots, eyed me curiously and conversed in guttural tones, wondering no doubt what there was in that little bundle of red and grey feathered to attract my attention. Poor children of nature! that Robin did not hold the affection in their hearts that it did in mine.



WHERE ROBIN GREETED US.

(Head of Cook Inlet; strand ice in channel at low tide. Knik mountain in the distance.)

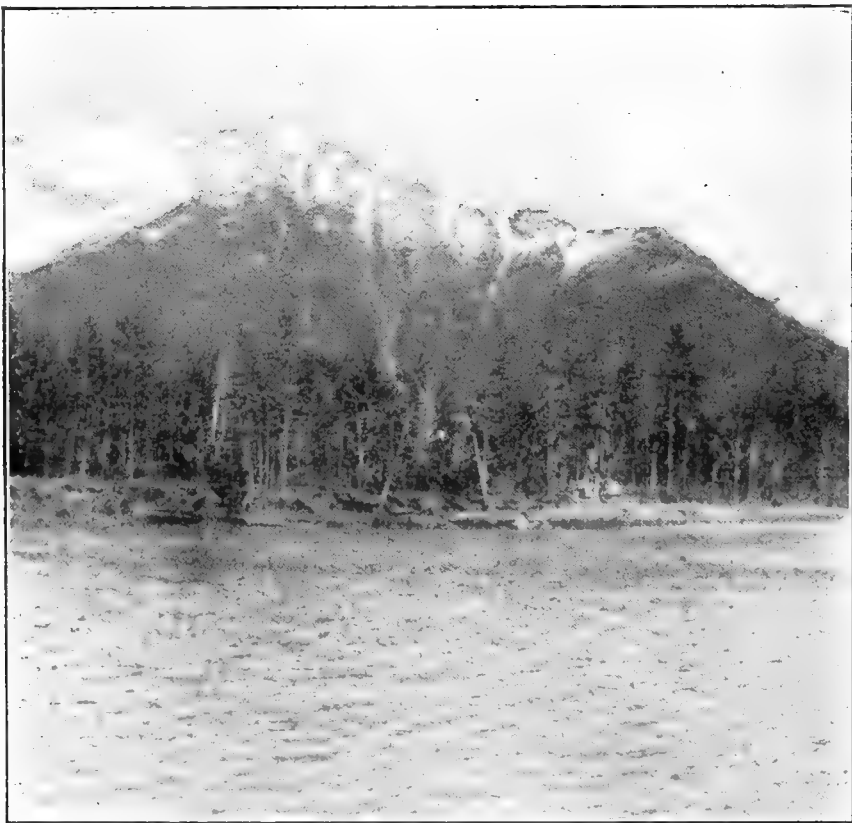
Redbreast was perched on the top of a spruce, and while I watched he flew nearer and alighted on a naked balsam-poplar. In his nervous, characteristic way he jerked his tail and lifted his wings several times, then hastened away, bidding me good-bye as he went.

What a fastidious bird! were there not enough groves and shade trees in either the United States or Canada in which he could select a nesting site? Why then should he compel his wife to journey so many thousand miles to build her nest and to bring forth their brood? Possibly he was like the man who became a savage—tired of civilization, and anxious to get as far from modern firearms, egg collectors and house cats as his strong wings could carry him.

Before my season's work was finished I learned that several other feathered friends, of my boyhood acquaintance, owned summer houses

in Alaska. A few weeks later while I was passing through a cluster of tall poplars, along the bank of the Knik River, a pair of golden-lined wings launched into the air, and in graceful billowy motion crossed an opening and alighted on a tree trunk. A Flicker, Highold, or more properly speaking, a Golden-winged Woodpecker, thought I; the same feathered carpenter of eastern woodland and orchard, that hews his home in a dead tree trunk, and brings forth his brood of young from the six or eight cream colored eggs deposited upon a bed of fine chips. The yellow on the underside of his wings and tail disappeared, as, in spasmodic hops he climbed up the tree, and I distinctly saw the bright red crescent on the back of his head. At the junction of two large limbs he dropped his wings, spread his tail, and bowing repeatedly from side to side, began to twitter in a low plaintiff voice, sounding like the words "won't you, won't you, won't you, won't you."

"Bye-en-bye him catch 'um wife," said my Indian guide.



A FLICKER SOUGHT HIS MATE AMONG THE TREES.

(Knik River and Mountains.)

Yes, that was so, for just then his intended appeared from behind a branch, and in spiral curves climbed slowly toward the top; he followed, displaying his finery and repeating the tender words. Evidently she did not take his wooing seriously, for when the top was reached she took flight and the two disappeared through the trees.

A Belted Kingfisher also paid us a visit and after perching for a few seconds on a branch overhanging a stream, suddenly plunged into the water and next appeared with a minnow in his bill. Resuming his position, he hammered the fish vigorously against the limb to kill it before swallowing his meal.

That same afternoon I heard a Tip-up, or Spotted Sandpiper, just around a bend of the stream. In answer to my reply he flew toward us, alighting on the gunwale of the boat, moored near by. There he sat bobbing his head and teetering his body in a surprised sort of way, as though to say "why, I thought I heard my mate about here somewhere." Then discovering us, he started up the stream, flying close over the water and whistling his tremulous call as he went.

How often while fishing on the Susquehanna River, have I fooled his relatives in like manner, or during nesting season, have chased his stilt-legged, fluffy children, until from fright, they would plunge into the water and cling to the weeds at the bottom. Fearing that they would drown, I have rushed in and hauled them to the surface and liberated them.

Who ever supposed that there were humming birds in Alaska? I never did; yet while waiting on the beach at Haines Mission for a party of Indians to take me up the Chilkat River, one came buzzing past. He paused a second, on seeing me, then thrust his long, slender bill

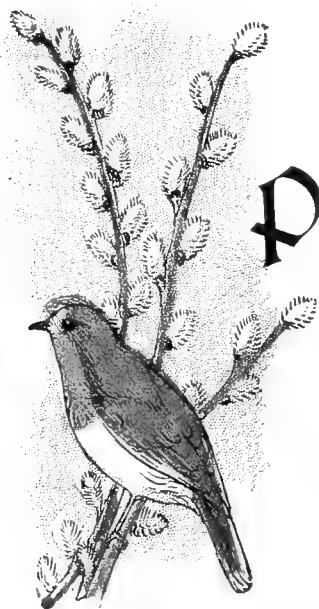


THE HOME OF THE KINGFISHER AND "TIPUP."

into a flower and extracted the drop of sweet. So rapidly did he pass from flower to flower that I was not able to follow, so catching him in the vision of my field glasses I watched him disappear.

Although he had a large variety of flowers from which to select honey, he must have missed the young spiders and spider's eggs, that constitute such a large proportion of his food in the United States.

And so I found after all, that Alaska was not the bleak and friendless country I had supposed it to be.



WHAT THE BIRDS SAY.

BY ALBERTA FIELD.

"Do you ask what the birds say?"

— Colridge.

Perhaps one must be abnormally imaginative in order to interpret into comprehensive English the songs of our wild birds, but it is a pastime not without attractions, and its interest grows on one apace. It soon becomes a habit for the bird lover to instinctively set to words, as it were, the various bird utterances, which eventually results in the individualizing of many singers of the same species, that are ordinarily recognizable by their similiary of song, and it is not until one makes a study of bird melody that one learns to differentiate between the song notes of a species and the utterances of a species and the utterances of an individual.

Observation teaches all of us that bird music varies greatly with the season, not only in note, but in modulation of tone. Even the casual student must distinguish between the enthusiastic clamor of the courting season, and the warble of passivity and content of late summer, among those residents who are not entirely silenced by the season. How jubilant is the blue bird's love call of "dearie-come-'ere" resound-through the budding trees through which they flit in search of HER, the gallants of their family arriving a few days in advance of the bird maidens who do not journey north in company with their turquoise-tinted mates. Their marriage song varies greatly from this courting trill, and the May air fairly vibrates with the continuous "cheer-up, dearie, dearie, cheer-up" of encouragement, while in autumn their sweet "thorough-wort" floats softly through the air, and one comes to associate it with the golden haze of the departing year, though just wherein lies the interest in this bitter herb is undiscoverable.

There is no more cheerful resident of the roadside thickets than the gray-capped, red-eyed Vireo, whose all summer song of "sweet-spirit, sweet-sweet spirit" is in constant adoration of the demure little mate, who, in her basket-like nest, sits and sits and says nothing, but she must receive some consolation and enjoyment from a partner whose music is not alone a lover's eulogy, but also a husband's praise song, which continues on through the long summer days, so filled with parental cares and fears that silence the enthusiasm of most of the feathered minstrels. Another all day and all summer songster is the alert nad buoyant little Maryland Yellow-throat, who is not to be outdone in exuberance of song as he flits in and out among the swamp bushes, and his "stitch-a-wiggle, stitch-a-wiggle, stitch-a-wiggle, stitch-em" gushes forth with such vehemance that it is almost exhaustive on a heated summer afternoon, and one longs for the hour when the "stitcher" shall be at rest under the shelter of some moon bathed willow for the night. Most every one is familiar with that other member of the warbler family, the Summer Yellow Bird whose enthusiastic "sweet-sweet-sweet-aint-she-sweet," is in continuous adoration of the eternal feminine; it is invigorating as a breath of the snowy cherry blossoms which he investigates so carefully for the small larvæ so destructive to the economics of that red-cheeked fruit.

We have all been admonished by the sharp "quit, quit" of some full-chested Robin whom we have disturbed in his privacy, but he cheers us immensely on a "misty, moisty morning" with his hilarious "clear-up, clear-up, sing." Walking quietly underneath a growth of young trees one can almost approach without disturbing a mild-voiced, rich plumaged Indigo Bunting, who is singing softly his "sweet, sweet, sweet, keep-it, keep-it, keep-it," but come too near the hidden nest of his dull-feathered little mate, patiently hiding under her soft breast feathers those dainty, white, blue-tinted eggs, and the gentle cadence is immediately changed to a series of vindicative "chips" that sound suspiciously like oaths of the bird vocabulary.

For three years I have recognized a chestnut-crowned Chipping Sparrow from his peculiarity of song, which seems to be his own individual rendition of the music of his species, and his "Think, think, think sir, (meditatively) what-in-all-she-is-to-me" (enthusiastically) induces one to speculate as to whether or no it is the same little wife each year to whom he rapsodizes so eloquently.

The song of the crimson grosbeak (James Lane Allen's Kentucky Cardinal) is particularly easy of translation, his "What cheer? What

cheer? *Girlie-girlie-girlie*" at daybreak or before, ringing out sweet and clear in glad greeting. But there is no more ardent lover in the bird world than the Cardinal's cousin, the Rose-breasted Grosbeak, and it is a delight to see him hurrying through the tree tops after his sparrow-coated mate, and hear his "quick, dearie, dearie, dearie," as he notes the espionage below, but more charming still is his estatic warble as he circles round and round his nesting mate who must thrill with the untranslatable outburst of melody from the throat of her "crimson tipped" lord whose call note is likened to the creak of a rusty hinge."

The Wood Thrush's "a-o-le-le, a-o-le" and the Red-winged Blackbird's "Hol-col-tee" are too full of linguals for English translation, but it does not take an experienced linguist to interpret the Meadow Lark's sweet call into "Erie, lake Erie," particularly if one has lived long on the borders of that great lake, but his song of "you-can't-see-me" is in flat contradiction of his visible proximity upon the top rail of the nearest fence, but perhaps he, like many an unfeathered equivocator, believes that if only one will assert often and long, some one is bound to accept his assertions as a truth some day.

Late into the autumn one may see sitting high up, on the branches of a dead tree, a tiny, sombre-coated Field Sparrow plaintively repeating his musical "see, sir, sweet, sweet, ain't she?" over and over again in face of the nipping winds and lowering skies, which the chickadees are apostrophizing as "sich-a-dav-dav-dav-day" as they gaily nod their black-capped heads to the dancing leaves.



MEADOW LARK.

A DAY IN MAY.

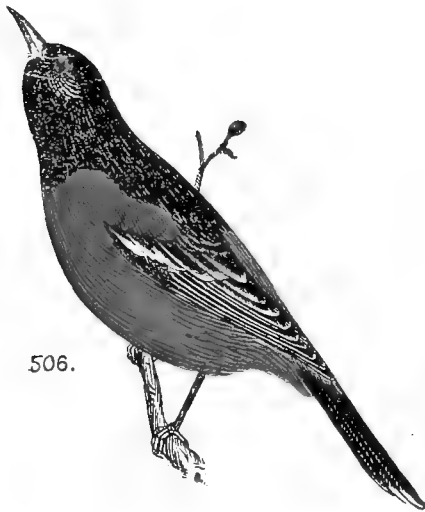
In May, 1900, the writer was living at the southern portion of the White Mountain System, and in one of the lines followed by the birds during their migrations. It was my delight to recognize seventeen of the forty-three warblers mentioned by Chapman, including the Cape May and Blackburnian, the latter being numerous; others would doubtless have been recognized by older students. Now my purpose in writing this article is to give one day's observation—not of a close student, but of one snatching a few moments at a time from household cares. My note book records a trip to the mill, a five minutes walk from the parsonage. It was a veritable paradise for birds, the banks of the stream were lined with alders where some rare warbler might flash into sight at any moment. On the little beach it was entertainment enough to watch the Spotted Sandpipers as they ran rapidly along, bobbing, bowing, teetering in their characteristic, energetic manner, but not only these made the morning bright, for several Catbirds ever restless and lively were flitting about, now eyeing me with inquiry then dashing into the thicket.

But, see that bird in his flaming plumage—beautiful enough in his dress suit of orange and black to satisfy the most fastidious lady love—the Baltimore Oriole. Hark! “Chebec, chebec, chebec,” and a little bright eyed, olive colored bird murderously sallies after a passing insect. “Kong-quer-ree, kong-quer-ree” and I turn to see a flock of red wings in the now marshy pasture and as I watch them spread their wings showing their crimson epaulets as kong-quer-ree sounds through the air we can well believe that “all's well.”

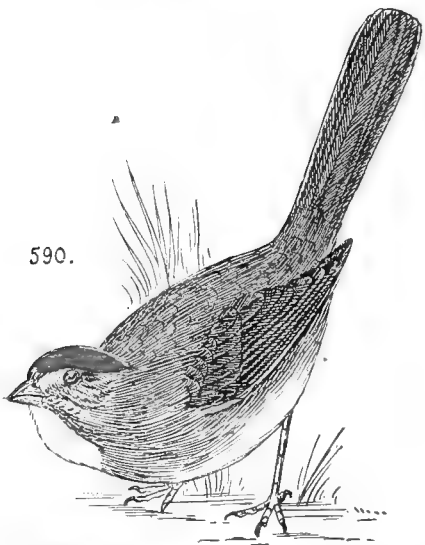
Ha! A warbler with yellow patches and black zouave jacket. Glad to see you. But what are you, with buffy throat lightly streaked, white sides and belly, with uniform tawny back, why should you be so shy my little veery?

But time forbids a longer lingering in this enchanted spot, and I must back to my duties go. What is this playing hide and seek in my syringa bush? Ah! I see you my little black-masked friend. Thanks, for this is my first acquaintance with you. Time for baby boy to have his nap, and as I lay him down I look out and see on an apple tree by the window a Parula in company with a Blackburnian Warbler. Surely, I need not go far from home when I have such of the elite as these. “Chick-a-dee-dee, chick-a-dee-dee,” can you not find enough to eat that you must come for the suet that hangs in the tree? And who is this in company with you my merry little Chickadee? A gay cavalier with a slaty blue head and yellow breast heavily streaked with black, also another that must be a knight with his black forehead and cheeks, chestnut crown and chestnut-rufous sides, throat and upper breast, and two white wing-bars, by name Magnolia and Bay-breasted. Well, this must be my reception day, for within ten minutes in addition to these already mentioned, the following warblers were seen, Black and white, Summer Yellow bird and Chestnut-sided have all called on me in the old apple tree. Twenty-four different species complete the day's record, and in closing I wish all readers of this article may enjoy a similar experience on a day in May.

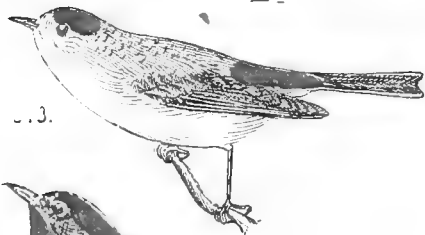
Identification Chart No. 17.

No. 506. Orchard Oriole, (*Icterus spurius*).

Length, 7 in. Eastern United States and the Gulf coast; west to the Plains; north to Connecticut and New York regularly, and casually to Maine and Canada. Breed throughout their U. S. range and Mexico. Adult male. Underparts, lesser wing coverts and rump chestnut greater coverts tipped, secondaries edged, and outer tail feathers sometimes tipped with white; rest of plumage black. Female. Upper parts yellowish olive, brightest on the head and rump; underparts dull yellow; wings dusky, tipped and edged with white as in the male; somewhat smaller than the male. Young male. The first year similar to the female except that he has a black throat; the second year he is mixed with some brownish in patches and the third year gets the same plumage as the adult.

No. 590. Green-tailed Towhee, (*Pipilo chlorurus*).

Length about 7.5 in. Whole of the Rocky Mountain region from Canada south through Mexico. Adults. Crown chestnut; rest of upper parts varying in different birds, from bright olive green to an olive gray. Breast, sides of head, and flanks clear ash, contrasting sharply with the pure white throat; belly white. Young. Upper parts including the crown, olive greenish; browner on the back than the adult; underparts similar but duller than the adults and somewhat streaked.

No. 643. Lucy's Warbler (*Helminthophila luciae*).

Length 4.5 in. Southern California and Arizona. Adults. Above ashy gray with a chestnut patch on the head and rump; below white. The young are the same except that they lack the chestnut on the crown.

No. 660. Bay-breasted Warbler, (*Dendroica castanea*).

Length about 5.5 in. Eastern North America; breeds from Northern United States northwards; south in winter to Mexico and Central America. Crown, throat, and streaks on side chestnut; middle and greater coverts tipped with white, and outer tail feathers with white spots. Female. Olivaceous above, but always showing traces of chestnut, especially on the sides. Young similar to the female but without any trace of the chestnut, and scarcely to be distinguished from the young Black-polls.

No. 529. American Goldfinch (*Spinus tristis*.)

Length 5 in. Found throughout North America except in the more northern parts. It is a resident throughout its range. Male. Black cap, wings and tail; otherwise yellow; coverts tipped, and wings edged with white. All tail feathers with a white spot on the inner web. In fall the black cap disappears and the upper parts are a yellowish brown while the underparts are a dirty white color. The female and young are very similar to the winter male.

No. 529a, Western Goldfinch, (*S. t. pallidus*).

Arizona. A paler form of the common Goldfinch.

No. 530. Arkansas Goldfinch, (*Spinus paltrius*).

Length 4.5 in. Western United States from the Plains to the Pacific, and south from Oregon. Crown black, as are also the wings and tail; back greenish yellow; underparts clear yellow; base of primaries, tips of coverts, edges of secondaries, and long spot on basal portion of inner web of tail feathers white. Female and young similar but paler and without any black on the head.

530a. Arizona Goldfinch, (*S. p. arizonæ*).

The upper parts streaked somewhat with black.

530b. Mexican Goldfinch, (*S. p. mexicanus*).

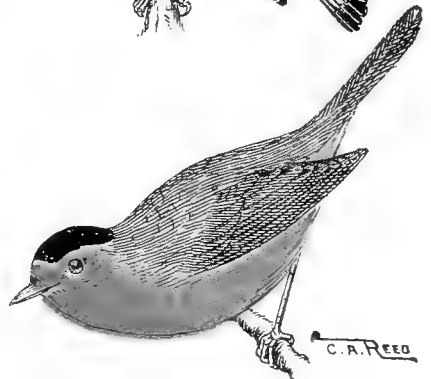
Southern Texas. Back nearly all black and the black on the crown extending to below the eye.

No. 685. Wilson's Warbler, (*Sylvania pusilla*).

Length 4.75 in. North America from the Rocky Mountains eastward; breeds from the northern border of the United States northwards. Crown black; upper parts including the wings and tail, greenish yellow; forehead, sides of head, and underparts bright yellow.

No. 685a. Pileolated Warbler, (*S. p. pileolata*).

Western North America. This is a brighter form of the Wilson's Warbler; the forehead and sides of head are a very bright yellow, sometimes approaching orange.



BARN SWALLOW.

A. O. U. No. 613.

(Chelidon erythrogaster).

RANGE.

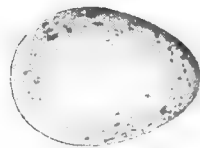
A common bird throughout North America, migrating in winter to the West Indies, Central and South America.

DESCRIPTION.

Length, 6 to 7 in.; extent about 13 in; tail from 3 to 5 in. Upper parts deep, glossy blue or purplish black, this color extending partly around the neck in front, but not forming a perfect collar. Forehead and throat, deep chestnut, rest of underparts paler. Tail very deeply forked and with white spots on the inner webs near the tips. The female has the tail a little less forked and the colors of the underparts are paler. Young with a still shorter tail, and duller underparts, and hardly any luster on the back.

NEST AND EGGS.

Barn Swallows generally build their nests within barns, attaching them by the sides to rafters. They are generally built so close to the roof that there is barely space for the bird to enter the nest from the top. When there is a scarcity of barns, these swallows build their nests under the eaves. The nests are made of mud and straws, and lined with feathers from the barnyard fowls. The mud is put on in pellets and is not smoothed down, so the exterior of the nest presents a very hummocky appearance. Sometimes the same nest will be used a second year, but more often a new one will be built, leaving sometimes as many as half a dozen old nests attached to the rafters as relics of former years occupancy. They lay from four to six creamy white eggs, which are plentifully sprinkled over the whole surface, but more thickly around the larger end with reddish brown and lilac.



HABITS.

Probably these are the most familiar swallows to all our readers, because of the freedom with which they use man's premises as their homes. A number of pairs frequently nest in one barn, where they dwell at peace with each other, and without consulting the owner of the place, for permission. As they are very desirable tenants, nearly all farmers are glad to have them take up their quarters in their buildings. Sometimes their only manner of entrance, is by the door which is either left open all the time or e'se opened early every morning.



BARN SWALLOW.

Generally though, there is some knot hole by which they are able to leave their quarters and commence their flight for food before the majority of mankind are awake.

The first intimation that the Barn Swallows have arrived, in the spring, is from the twittering that comes from the meadow or pond. We look and see several dark bodied birds skimming close to the grass. As they come close by us we can see the glossy blue back, and as, now and then, one wheels about or swoops up, just clearing the top of our heads we can see the ruddy underparts, and the long slender tail with its row of white spots. It has always seemed to me that the flight of these swallows is the very embodiment of ease and grace. Skimming, gliding, sailing, they have traversed the length of the field; an upward curve and a downward shoot, and they have safely passed over the row of apple trees and the wall that marks the division of the next farm; shooting down the hill beyond, with the speed of a meteor, they glide swiftly across the pond, just touching their breasts to the surface of the water to refresh themselves. Flocks of them will spend hours at a time, passing to and fro over a pond, feasting on the insects that are so numerous in such places. Towards night they become even more active than they were in the morning, and as they dash about the meadow, it seems as if they were racing with each other to see which one could traverse the field in the shortest space of time. Although, undoubtedly, they enjoy these gambols in the air, it is not all play with them, for at this time they are busy gathering in the insects which in countless hordes, rise from the grass at dusk.

Two or three weeks after their arrival from the south, each pair selects a site for its nest. This is not a difficult matter for year after year, the same pair will return to the same barn. If there are accommodations for more, the young of the preceding year will nest in the same place, but if the barn is already occupied by as many pairs as there are conveniences for, the young have to shift for themselves and find a new site. Very frequently when the quarters inside are crowded, newcomers will make their homes underneath the eaves on the outside.

As soon as the exact location of their nest is definitely decided upon, numerous trips are made to the edge of the pond for nesting material. First, pellets of mud are brought. These are fastened to the side of the beam, in the form of a semi-circle. Their glutinous saliva assists the natural adherence of the mud to the support. These pellets, with straw added to assist in holding them together, are continually placed in position until the nest has assumed the shape of a bowl, cut vertically through the middle and with the cut portion against the beam.

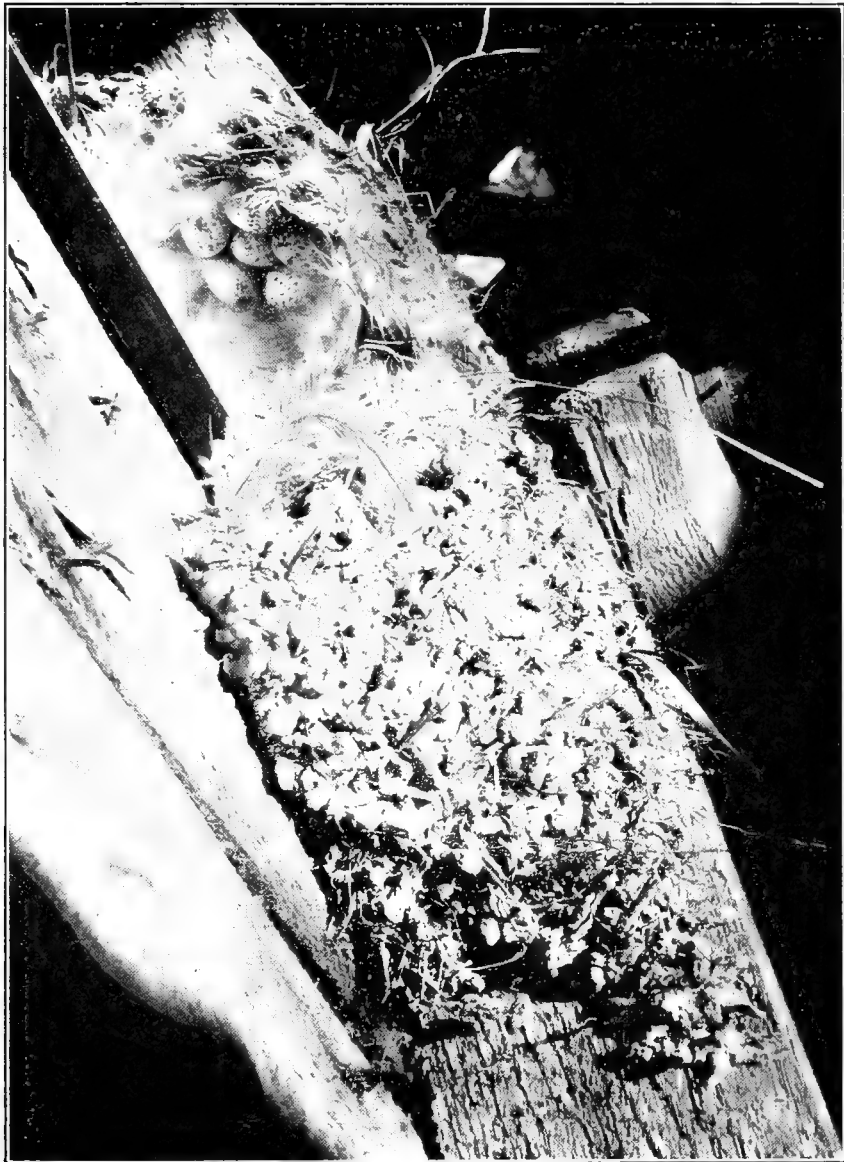


Photo by G. E. Moulthrop.
NEST AND EGGS OF BARN SWALLOW.

The nest is softly lined with hens feathers and then the home for their little ones is completed, the pellets of mud on the outside giving it a very rustic appearance. This nest is built in a very similar manner to that of the Phoebe, but the latter nearly always decorate the outside of their nest with moss, while the Barn Swallow very rarely does.

After the four or five brown speckled eggs have hatched, the interior of the barn becomes a regular chatter box, with its five or six pairs of excited and enthusiastic parents feeding their little ones and singing or talking all the time. At intervals during the day, all the parent birds will congregate on the cross rafters and hold long conversations, presumably on the respective merits of their youngsters, or on the proper method of feeding them. When the young birds are about half grown, and begin to feel as if they were "pretty big" their voices are heard at all times when they are not asleep. They leave the nest when almost three weeks old, and spend a day or two in exercising their wings, flying from rafter to rafter. When they feel that they have control of their wings, they enter the outer world, and for weeks are taken in hand by their parents, who initiate them into the art of aerial gymnastics. It is a very common sight during the latter part of the summer to see an old bird, denoted by the long tail and bright colors, followed by a young, duller, short tailed one, the latter executing every move and turn made by his tutor.

When the weather is suitable, Barn Swallows will raise two or three broods in a season, the first brood accompanying their parents as they go back and forth to feed the new little ones. Until they depart in the fall, both adults and young return to the barn each night, where they roost on the rafters.

Of course, nesting as they do, they have very little fear of the human race, and it has always seemed to me that, when out in the fields, they seem to delight in feeding as near you as possible, returning time after time to skim close by you or to swoop just over your head. The accompanying excellent photograph of a Barn Swallow's nest and eggs, by Mr. Moulthropé, was quite a difficult piece of camera work. The nest was located in the peak of a barn, and about forty feet from the floor. The outfit was fastened to the top of a long ladder; the camera was then focussed and light thrown on the nest by means of a mirror, placed near the barn door; this light in turn was reflected into the nest by another mirror placed just above it.



BLACK-CROWNED NIGHT HERON.
(Young and Adult).

BLACK-CROWNED NIGHT HERON.

A. O. U. No. 202.

(Nycticorax nycticorax naevius.)

RANGE.

America, chiefly south of Canada. Breeds from Central America, where it is a resident, northwards. Winters south of the United States, through the whole of South America.

DESCRIPTION.

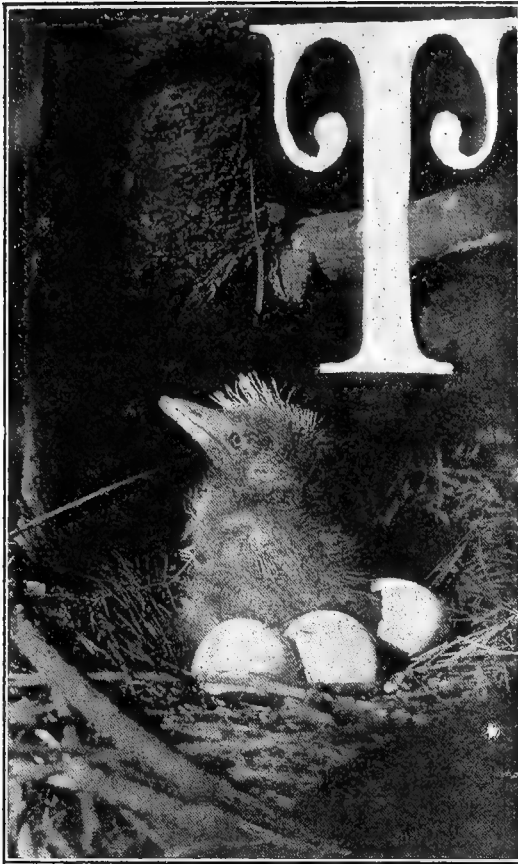
Length, about 24 in.; extent, about 44 in.; tail, 5 in. Adults: bill, black; eyes, red; lores, greenish; legs, yellow; crown and back, glossy greenish black; rest of upper parts, including wings and tail, bluish gray; throats and under parts, whitish; breast, grayish, and the feathers somewhat lengthened. Three long, slender, white plumes project from the back of the head. Young: eyes, yellow; legs, greenish yellow; no plumes on head; crown, brownish; above, brownish gray, the feathers with white streaks or spots in the center; under parts, grayish streaked with darker.

NEST AND EGGS.

Night Herons breed in large colonies or heronries. Large trees are generally used for these colonies and the nests are, as a rule, placed high up. In the northern parts of the United States a large growth of pines is preferred. The nests are large, but generally shabbily built of larger sticks for the outside, and lined with fine twigs and rootlets. They lay three or four, and very rarely five pale bluish-green eggs. The breeding season varies from soon after the first of April in Texas, to the middle or latter part of May, or early in June in New England.



HABITS.



THE heron family is an interesting one, and one of the most interesting of the family is the Black-crowned Night Heron. They are more heavily built birds than others of the family, and have stouter bills, shorter necks, and shorter but proportionally heavier legs. In common with most of the herons, they are gregarious and large colonies of them nest together in places called heronries.

On any still night in summer you are very apt to occasionally hear one of these birds as he flies over. Their note is a deep guttural "qua" or "quark"; this is repeated at intervals of from four to six seconds when the birds are flying at night. They are very susceptible to even a crude imitation of their note; when a boy and living in a small town, I fre-

quently used to amuse myself evenings by calling the "Quarks" or Night Herons. Waiting until I heard one of the birds in the distance, an answer to every one of his calls, would gradually bring him nearer and nearer; at last his dark gray form would be visible through the mist, and he would circle about several times, each circuit bringing him nearer, until, unable to discover his relative, he would wing his way out of sight.

There are several heronries within a few miles of Worcester; they are all small ones, the largest containing perhaps fifty or seventy-five pairs. This one is located in a small patch of large pines, that is, it was last spring. They have had to change their location nearly every year because the woods have been cut off. A short drive through the woods brings us in the neighborhood of the pines. All is silent and not a bird is seen until we round the last bend before reaching the heronry. Then as the old birds see us, they begin to circle about uttering angry "quas", and from the tree tops comes a strange sound, like the magnified tickings of numerous "grandfather's clocks." This is the characteristic noise made by the fledgling of the Night Heron. The trees surround a small stagnant pond, from the shores of which, hun-

dreds and hundreds of frogs leap, with a splash into the water, as we make our way about. Strangely, although such an abundance of food is at their very door, the old birds do not seem to do their hunting for food for the little ones here, but make a long flight to another larger pond about a mile away. Perhaps after all they are wiser than we give them credit for being, and are reserving this supply for the young to catch themselves when they have left the nest. Nearly every tree in this heronry had it's nest, and some had two or three. They were nearly all placed well up towards the top. Although this location had not been used by the herons before, the trees and branches were becoming well coated and the odor from decaying matter was quite apparent. For ascending, a tree was selected, that had but one nest in it and was considerably cleaner than the majority; nevertheless it was very difficult to climb,



Photo from life by A. J. Meyer.
NIGHT HERON LEAVING TREE.

especially if one had any regard for his clothing. The tree was quite large; in fact, one of the tallest in the grove, and when the nest was reached it was seen that I was in a position to see to the best advantage all that went on in the colony.

The nest above me contained one young bird and one egg. The nest was so large and built in such a frail manner that I could not get by to climb above it without danger of injuring its contents. In the nearest

tree were two nests, one with three eggs and the other with three eggs and a young bird. The old birds were quite excited and continually flew around me, but at a respectful distance. They are very pretty if not exactly graceful birds, when in flight. They fly in the characteristic heron fashion with the head drawn in close to the body, and the legs trailing behind. After I had remained quiet for about ten minutes, they began to settle down in the tops of the trees, their light plumage contrasting very effectually with the dark green of the pines. None of them showed any disposition to return to their nest while I was there, although one did alight on the top of the tree just above the nest, and barely six feet from my head. It is probable that their young are fed mostly during the early morning and after dusk, and not so often during the day. A Red-shouldered Hawk, which had young within a short distance from the heronry, proved a constant source of worry to the herons, and doubtless kept his larder well supplied with young herons.



Photo from life by Alfred J. Meyer.

YOUNG NIGHT HERONS.

SPRING OBSERVATIONS.

(Mayfield, Ky.)

Having had occasion to spend about one week recently, beginning with April 27th, in traveling over my county (Graves), during which time I traversed at least 100 miles, and being an ardent lover of birds, I made some observations that I thought might possibly be of some interest to your readers. I will state that my business was of such a nature as to admit of my giving close attention, which I did.

In the first place, I observe that our people have almost quit preparing boxes for the martins and none for blue birds. This is due, I think, to the encroachments of the English Sparrow. I saw two or three boxes.

I was delighted to see a goodly number of Scarlet and Summer Tanagers and Cardinal Grosbeaks. It amazes me to see people pass right beneath a tree in which one of these beauties sits and sings his sweet song, without even taking notice of its presence or song.

Baltimore Oriole very rare. Observed one only. At least one Orchard Oriole at most every farm house where there were any trees.

At 8 o'clock one night I stood in the middle of an open field, in a thinly settled locality, when most all nature seemed asleep, and listened with much pleasure to the distant threat: "Whip-poor-will," which was the first time in years. It certainly brought vividly before my mind many recollections of my boyhood. The superstition of my companion concerning this bird surprised me. He is more than 60 years of age and a good business man. When I called his attention to its notes, he seemed very serious for a moment, then related to me that once this bird alighted in his yard and sang for quite a while one night and that his wife died within a few days. And that later in life another came to his home one night and sang about the door against his vigorous protests, and that his little boy, then in perfect health, took sick within a few days and died, and that a visit from this bird was an unfailing sign of some great calamity to the home visited.

Kingbirds, blue jays, sparrows, wrens, bluebirds, Kentucky Warblers, Tomtits, Chickadees and Catbirds appeared to be fairly plentiful.

Robins, doves, flickers, meadowlarks, swallows and woodpeckers seemed rather scarce. Blackbirds plentiful.

Our "sportsmen" are killing all the doves under the existing law in this state which declares them to be "game birds." This law should be repealed and they should by all means be protected all the time as they are decidedly one of our most valuable birds to the farmer and are too small to eat.

C. W. WILSON.

NEW BOOKS OF INTEREST TO BIRD STUDENTS

A First Book on the Birds of Oregon and Washington, (J. H. Gill Co., Portland, Oregon,) by William Rogers Lord. "A Pocket Guide and Pupil's Assistant in a Study of the more common Land Birds and a few of the Shore and Water Birds of these states." Mr. Lord is an entertaining writer, and his knowledge of his subject has been acquired by a close companionship and study, in the field, of the birds in the states of which his book treats. Mr. Lord's object primarily, was to produce a book that would be of the greatest interest and value to beginners in the study of birds, but as is frequently the case, most of those who think they "know it all" can learn much from a perusal of its pages. It is a book of 300 pages and is of convenient size for the pocket. (4x6 in.)

Wild Birds in City Parks, (A. W. Mumford, Chicago), by Herbert Eugene Walter and Alice Hall Walter. Paper, 40 pages, 25 cents. A descriptive list of one hundred birds which are seen in Lincoln Park, Chicago, during the spring migration. This is a valuable list for those who reside in that section of the country, and also useful in most localities east of Chicago as the bird life is nearly identical.

Preliminary List of Birds of Boulder county, Colorado, by Junius Henderson; published by the University of Colorado, Boulder. This is strictly a preliminary list and is not considered to be complete. It records one hundred and sixty species.

Quailology, by Harry Wallas Kerr, Little Sioux, Iowa. In this volume, Mr. Kerr, who is secretary for the National Quail Breeders Association, has presented the methods, pleasures and difficulties of quail culture, with the hope that it will serve to stimulate others to preserve the game birds by propagation, as well as to aid those who are now making the attempt.

ANSWERS TO CORRESPONDENTS.

J. A. C.—Your trouble in photographing nests and eggs is the same as that of a great many others who send us pictures. You are using your camera with the lens wide open, whereas it must be stopped down to at least f64 to get the requisite depth of focus. I note that you say the maker of the lens claims that it has an unusual depth of focus; that is claimed for all makes of lenses, whereas it is a quality that is in no wise dependent upon the maker, being governed entirely by the relation of the diameter to the focal length. To get good pic-

tures of nests at close range, you *must* use a small stop and consequently a longer exposure.

We have several queries in regard to developing plates. We can do no better than to refer any one who wish points on this subject to "Hints on Negative Making," by G. Cramer. Anyone who will follow instructions given in this manual will have success from the start. It will be sent free if you mention AMERICAN ORNITHOLOGY. Address, G. Cramer Dry Plate Company, St. Louis, Mo.

D. S. Holmes, Kellog, Calif.—The bird that you describe is the Water Ouzel or American Dipper.

M. D., Waltham, Mass.—Wilson's Thrush builds its nest on the ground and lays bluish-green eggs. The Blue Jay builds its nest early in May; the eggs are of the size of a Robin's and greenish or brownish, speckled with brown. There is such a bird as the Saw-whet Owl. It is the smallest Owl found in the east, and found here only in winter.

E. W. G., Braddyville, Ia.—The bird that you describe is Cooper's Hawk. This hawk lays pale bluish-white eggs.



Photo by S. D. Nixon:

DOUBLE NEST OF A PHOEBE.

S. D. Nixon, Balt., Md.—I enclose a photo of a double nest of the Phoebe. I saw a Phoebe go under a shed adjoining a barn, and there found the nest. On one side of the nest the bird was sitting on four eggs, while the other side had two, which were also warm.



Address communications for this department to
 MEG MERRYTHOUGHT, 156 Waterville Street,
 Waterbury, Ct.

DEAR YOUNG FOLKS:

Not long ago I heard some one say: "I don't think much of this Nature Study among the children, especially the study of birds." What reason do you suppose was given for such a strange remark? It was this. The children disturb and frighten the nesting birds by constant visits, and even molest the nests in their eagerness to learn all about bird life. Perhaps there is a grain of truth in this statement. I am sure the many boys and girls who share this corner will think about this, and do all they can to protect the birds in their natural rights.

There is another thing about which bird students are sometimes thoughtless, and I call upon our girls—whether members of Audubon Societies or not—to help public sentiment in this respect. If you are really fond of these "little brothers of the air" would you enjoy wearing their dead bodies upon your hats? Even if the ornament (?) is made of dyed chicken feathers, the principle is the same. I met a lady on the street not long ago whose hat was simply trimmed with a circle of tiny dead birds perched all around the broad brim. I wonder if she was a "fair barbarian." If each one of our readers would use his influence in these two respects, I think the bird world at least, would be the happier.

I am making many demands upon you this month, for I have one more request to make. When you speak of the birds, give them their right names; for instance, what confusion would be saved if we stopped calling the brown thrasher, "the brown thrush." There are several thrushes, all brown, and this thrasher is not a thrush at all, but belongs to the same family as the catbird and mocking bird.

I will not keep you longer from the world out of doors on this glorious June day. Goodbye until the month when the bird of freedom soars.

Cordially your friend,

MEG MERRYTHOUGHT.

ANSWERS TO MAY PUZZLES.

Enigma No. 1, Great Northern Shrike, Enigma No. 2, White-breasted Nuthatch, Chickadee.

BIRDS THAT TELL THEIR NAMES.

No. 4, Phoebe, No. 5, Pewee.

ROLL OF HONOR.

Alice Garland, Boston, Mass., Marietta Washburn, Goodwin, S. D., Hugo E. Wunsch, Haven, Wisconsin, Samuel D. Robbins, Belmont, Mass., Leroy B. Noble, Cromwell, Conn., Louise Jordan, Defiance, Ohio., John A. Parks, Shaftsbury, Mich., Raymond Hill, Uxbridge, Mass., Everett P. Walton, New Vineyard, Maine, Gerald B. Thomas, Livermore, Ia., Jean Lampton, Riverdale-on-Hudson, N. Y., Stafford A. Francis, Exeter, Mass., Charles H. Abbott, Antrim, N. H., E. W. Greaves, Clearmont, Mo., Wm. Schneider, LaCrosse, Wis., Isidor Reh fuss, LaCrosse, Wis., Edith M. Little, Waquoit, Mass., Grace E. Peaslee, East Ware, N. H., Catherine Okey (age 9) Cambridge, O.

EXTRACTS FROM OUR MAIL BAG.

One day I noticed an exceedingly large Red-winged Blackbird fly up from the swamp and seem to call others, for presently two smaller Blackbirds arose, and the three flew off toward the east. In a very short time the three, with about one hundred other male Blackbirds, came back and settled down in the swamp near me. The three birds flew to the east end of the lake again, and returned this time with about one hundred female Blackbirds. When all were down feeding, the largest of the three birds flew off again, and from his actions and his size I judged him to be the king, or leader of the flock. On his return one Blackbird only, accompanied him, and this was a female as large as himself. When these two came near to the flock every bird arose as if to meet them, and then all settled down to feed. As I was watching them one day toward the end of summer they all rose and flew south and I did not see them again that year.

One day as I was walking along the shore beneath some sand bluffs, I noticed that there was a hole about four inches in diameter in the side of one of them. When I put my arm in the hole I could not reach the end. I found two pieces of lath on the beach and tying one to the end of the other, I put that into the hole, and I could feel the end of the stick being pecked at. I knew then that there must be a

kingfisher on her own nest. With the hunting ax that I had with me, and a stick, I managed to dig away about nine feet of the bank, and then reaching my hand in I drew out a female Belted Kingfisher. The next time I drew out my hand I had six snow white eggs.

LOTHROP LEE BROWN,
Evanston, Ill.

You asked our opinions on Gerald Thomas' Goldfinch. I should not think that it was intoxicated, but maybe it had formerly been tame. One I once found in the summer of 1898 was not afraid, of course it would not be in a baby such as "Goldie" was. There was a maple near our veranda, and in it a pair of Goldfinches were nesting. The baby, when the time came to go, would not fly, and so he was left to the "Bird Ladies" and my own care. We caught flies for Goldie at first, but she learned to eat egg. At last the "Bird Ladies" had to go and Goldie with them. The last I heard she was in full plumage and song, and full of love.

LEWIS S. GANNETT,
Rochester, N. Y.

A few days ago I went out to my uncle's ranch to spend the day, and having nothing to do, lay down under a shed and watched the swallows busily building their mud nests on the rafters and under the eaves of a large barn.

Now the place where these swallows went for mud was at least a quarter of a mile distance, yet there was one that got back fully ten minutes before the others every trip. Hardly being able to understand how it was that he was so much quicker of wing than the others, I resolved to watch him, and see if he was really so much quicker or if he had discovered a new mud hole nearer. But, no! It was neither one of the things, for I watched him, and when he had finished his work on the nest, he flew neither faster than the others, nor was it a new mud hole. But, yes, I can call it a new mud hole, for he flew straight to another nest, (not his own) and deliberately broke off a piece of the fresh mud and then calmly began working it into his own nest as if by rights belonged to him. Having discovered that much I waited to see what the robbed bird would do on his return, but to my surprise he began working on his nest as if nothing had happened out of the usual.

LESTER D. SUMMERFIELD,
Reno, Nevada.

I have put up two bird boxes and am having some tree swallows build in them. They are very tame. I photographed one this morning.

SAMUEL D. ROBBINS,
Belmont, Mass.

PUZZLES.

BIRDS THAT TELL THEIR NAMES.

(Concluded.)

Our third flycatcher, (No. 6,) is a good deal smaller than No. 5, and one of his names refers to his small size; but the name he calls has only two syllables in it and he jerks it out. He does not care very much for the woods, but likes such places as shady lawns and old orchards, and on a branch there builds a beautiful little nest of fine roots, down, like that which carries the thistle seeds, long hairs, lots of things, but all dull in color so that when the nest is finished it is so like the branch that holds it, and is so small that it is not an easy one to find.

My last bird, No. 7, likes the bushes at the edge of the woods, and there he scratches away among the leaves, now and then calling out his name, and sometimes flying up to a low branch to sing a short song. He is about as large as a robin and is a dark bird with a good deal of black on his breast as well as above, but there is dull reddish on his sides and as he flies he shows white in his long tail. His wife is much browner, but she has the white tail feathers too.

ISABELLA McC. LEMMON,
Englewood, N. J.

NUMERICAL ENIGMA.

I am a beautiful bird composed of fifteen letters. My 1, 9, 2, 11 is a large but not very ferocious wild animal. My 2, 14, 9 is a liquid liked by many. My 3, 7, 10, 6, gives work to many people. My 5, 8, 15, was aroused by my friend's 3, 12, 9. My 4, 13, 7, 3, is a very sharp and good one.

JEAN LAMPTON,
Riverdale-on-Hudson, New York.

AN ENIGMA.

My first is cat but not in rat,
My second in rat but not in cat,
My third is in you, but not in me,
My fourth h's not in large but it is in wee,
My whole is a bird that nests in a tree,
And is very common to you and me.

CLARENCE C. ABBOTT, (age 10)
New York city.

CHARACTERISTIC INITIALS.

What are these birds whose initials appear in capitals below, and whose songs, colors or habits are thus described.

1. Beautiful Whistler.
2. Noted Slayer.
3. Bright Orange.
4. Sweet Singer.
5. Merry Lays.
6. Most Doleful.

MARIETTA WASHBURN,
Goodwin, S. D.

AN HOUR GLASS.

OOXOO To move hastily.
OXO A human being.
X A consonant.
OXO What all boys like.
OOXOO A favorite sweet.

Centrals read downward spell the name of one of the most cheerful songsters.

MARIETTA WASHBURN.

WHAT IS HIS NAME ?

Once upon a time, (a time not far from April 27th) the T. M. went forth to seek their fortunes, and met a fairy magician, who was also a fairy musician. Do you know what "T. M." signifies?

It does not refer to the mince pies which the old lady marked T. M., 'tis mince, and T. M., 'taint mince, of which one writer tells us. The mystic letters in this case simply stand for "Three Maidens," who herewith bring you a glimpse from one morning's delightful outing.

One charm of an outing afield is the uncertainty which attends it. It is a species of gambling. You may meet with thrilling experiences, or you may see nothing new, but simply gain a broader horizon, the roses of health, and "the good digestion which waits on appetite," prizes not to be despised. On this bright April morning the T. M. had the good fortune to meet with a gay little sprite in feathers, (but a quarter of an inch longer than a humming bird) who had stopped in Waterbury for a flying visit on its way to its Canada home. Its coat was olive gray, lightened to yellow when touched by the sun's rays; its vest was a soft yellowish gray; its bill was black, and its wings were trimmed with white.

As the T. M. watched the cheery little fellow darting hither and thither in a low evergreen, examining every nook for insects for lunch. flirting wings and tail constantly, and peering out saucily at them, a bright scarlet spot appeared where a moment before was an ashen crown. In an instant the flaming vision had disappeared, and it seemed to the astonished T. M. impossible that such a blazing crown could be so perfectly concealed beneath the smooth head dress of the bird now dancing so merrily in the uppermost branches. But there was no mistake, again and again, glimpses of the flashing red were seen against the green foliage. "Oh, if he would only come down on that branch right before us and let us see the magical transformation," sighed one of the T. M. The fairy above them evidently heard this, for down he flew immediately before his delighted friend, and calling "see, see, see," with a polite nod, raised his grey cap, and again the the red head was revealed in its glory. With another bow he darted away to a tall tree, and sang, and sang, a clear melodious warble, to which the T. M. listened enchanted.

Who will give the name of this gem of a morning's outing?

GLEANINGS.

From blossom-clouded orchards, far away
 The bobolink twinkled,
 June's bridesman, poet o' the year,
 Gladness on wings, the bobolink is here!
 Half hid in tip-top apple bloom he sings,
 Or climbs against the breeze with quiverin' wings,
 Or givin' way to mock despair,
 Runs down, a brook o' laughter, thro the air.

LOWELL.

The little bird sits at his door in the sun,
 A tilt like a blossom among the leaves,
 And lets his illumined being o'er run
 With the deluge of summer it receives;
 His mate feels the eggs beneath her wings,
 And the heart in her dumb breast flutters and sings,
 He sings to the wide world, and she to her nest,
 In the nice ear of Nature which song is the best?

LOWELL.

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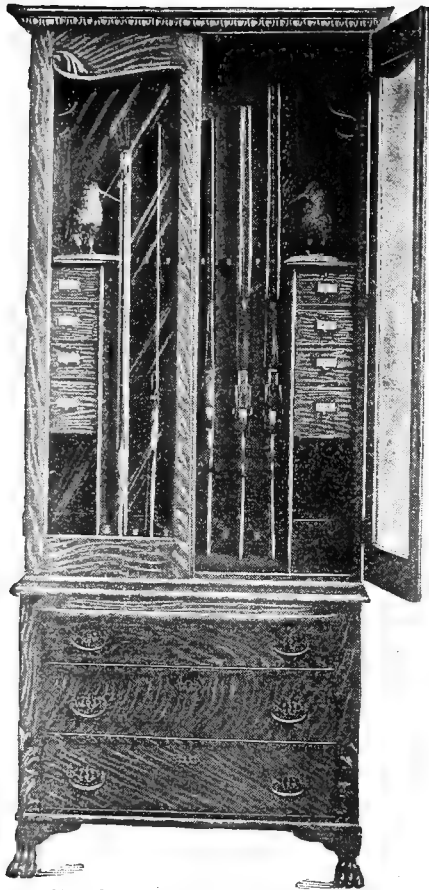


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| 4 Nest and Eggs of Woodcock | 29 American Robin on Nest. |
| 5 Three Young Woodcock. | 30 American Robin Feeding Young. |
| 6 Ruffed Grouse on Nest. | 31 Five Young Chickadees. |
| 7 Nest and Eggs of Ruffed Grouse. | 32 Chickadee at Nest in Bird House. |
| 8 House Wren (male). | 33 Chickadee at Nest in Tree. |
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| 22 Black and White Warbler on Nest. | 47 Phoebe on Nest. |
| 23 Field Sparrow Feeding Young. | 48 Hairy Woodpecker. |
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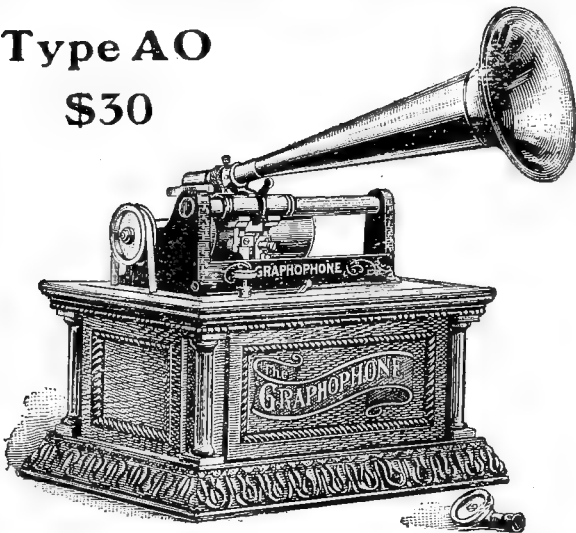
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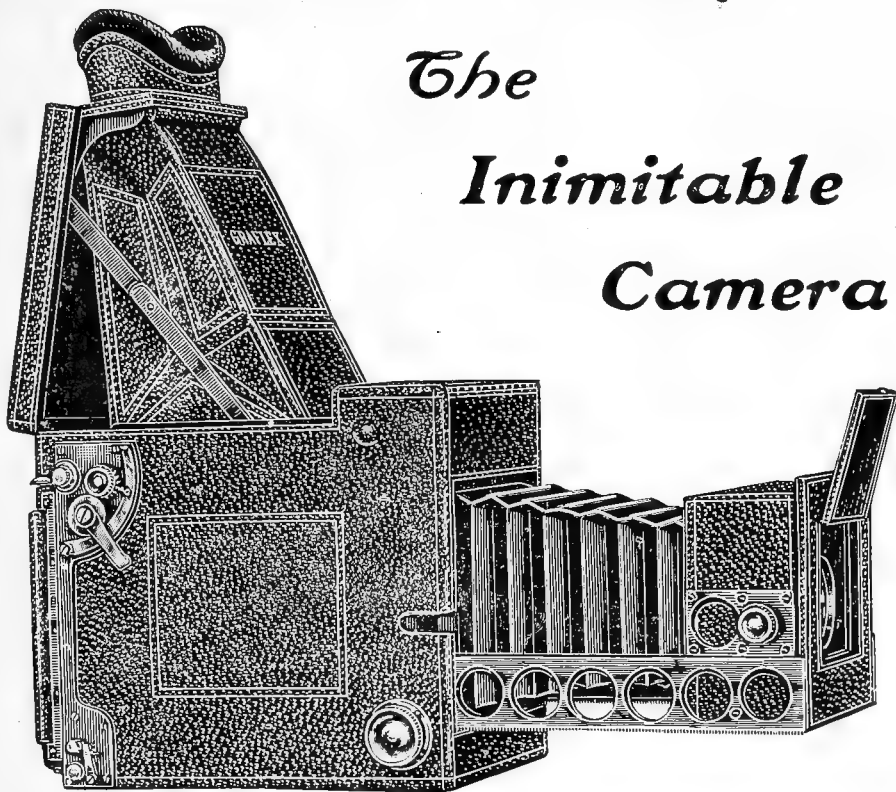
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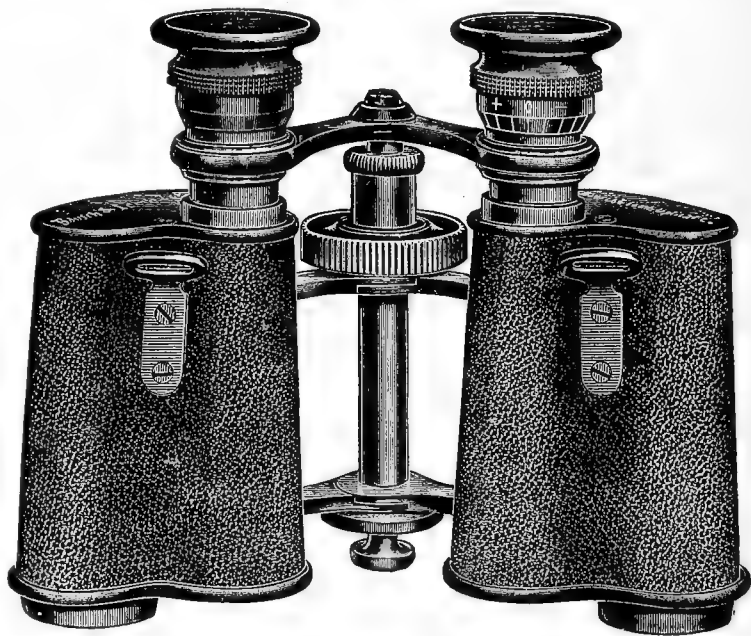
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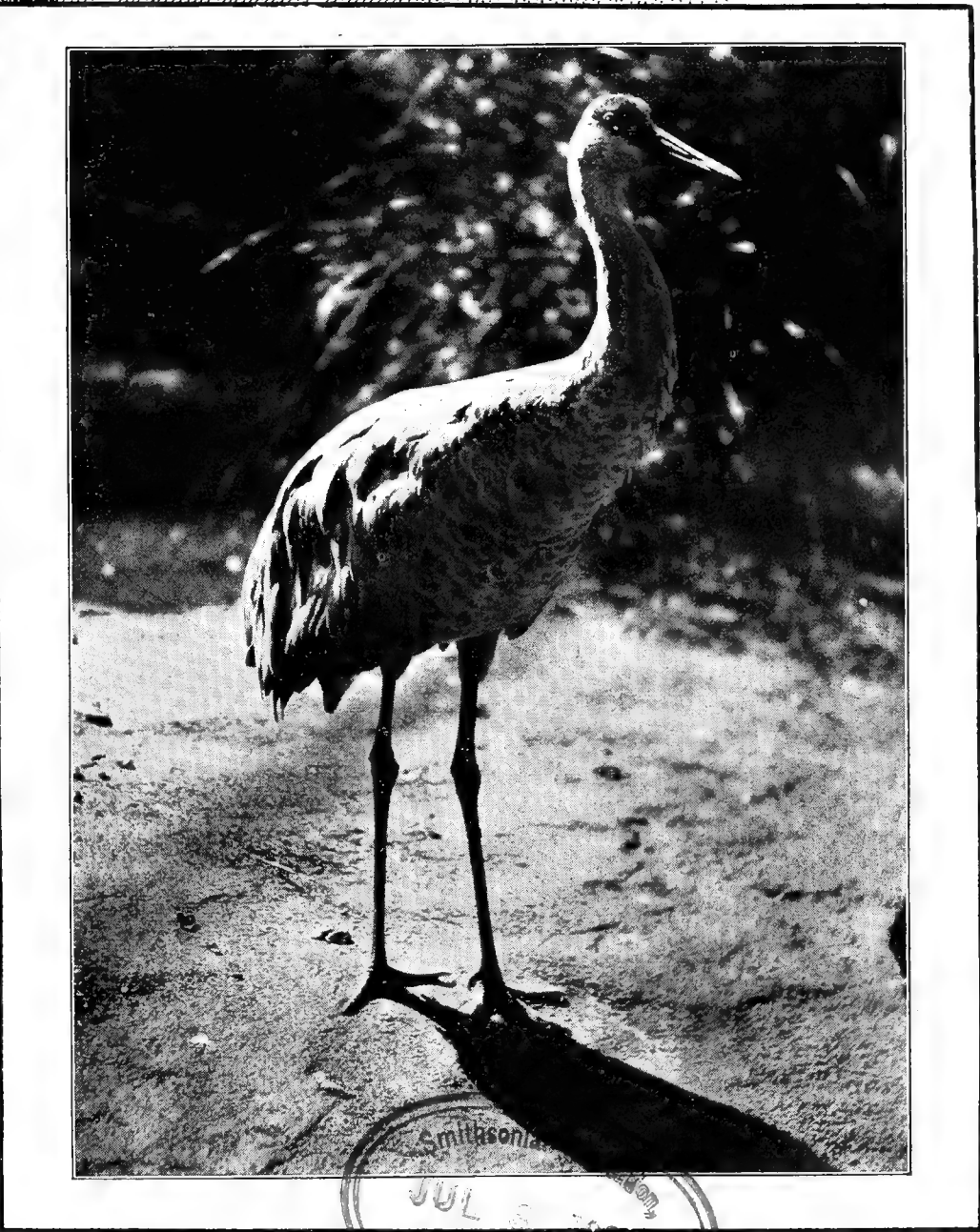
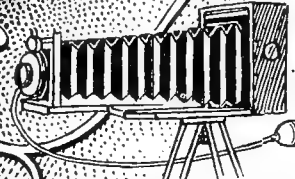
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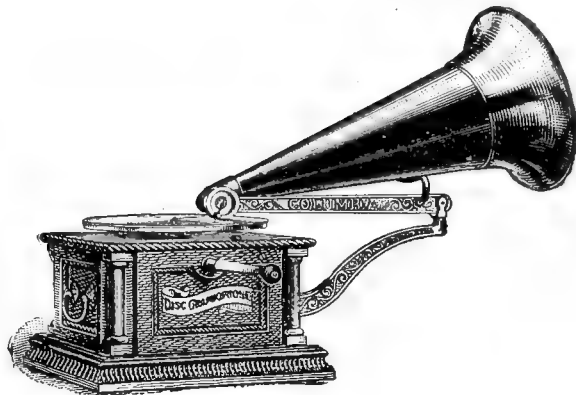
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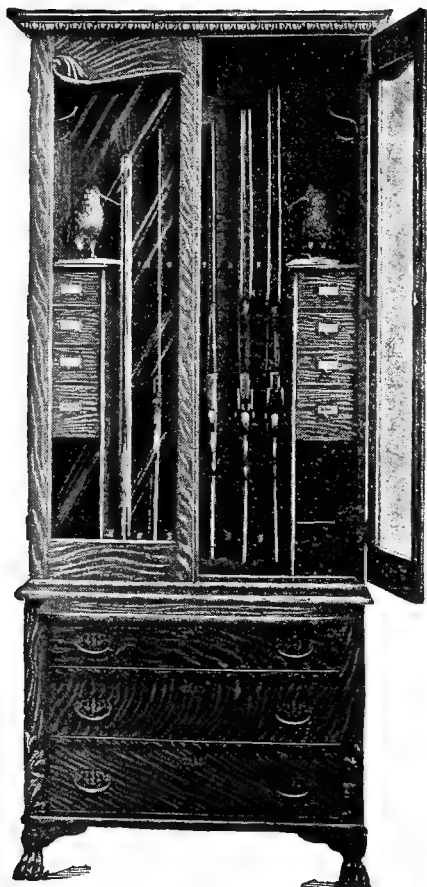
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A Magazine Devoted Wholly to Birds.

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NO. 7

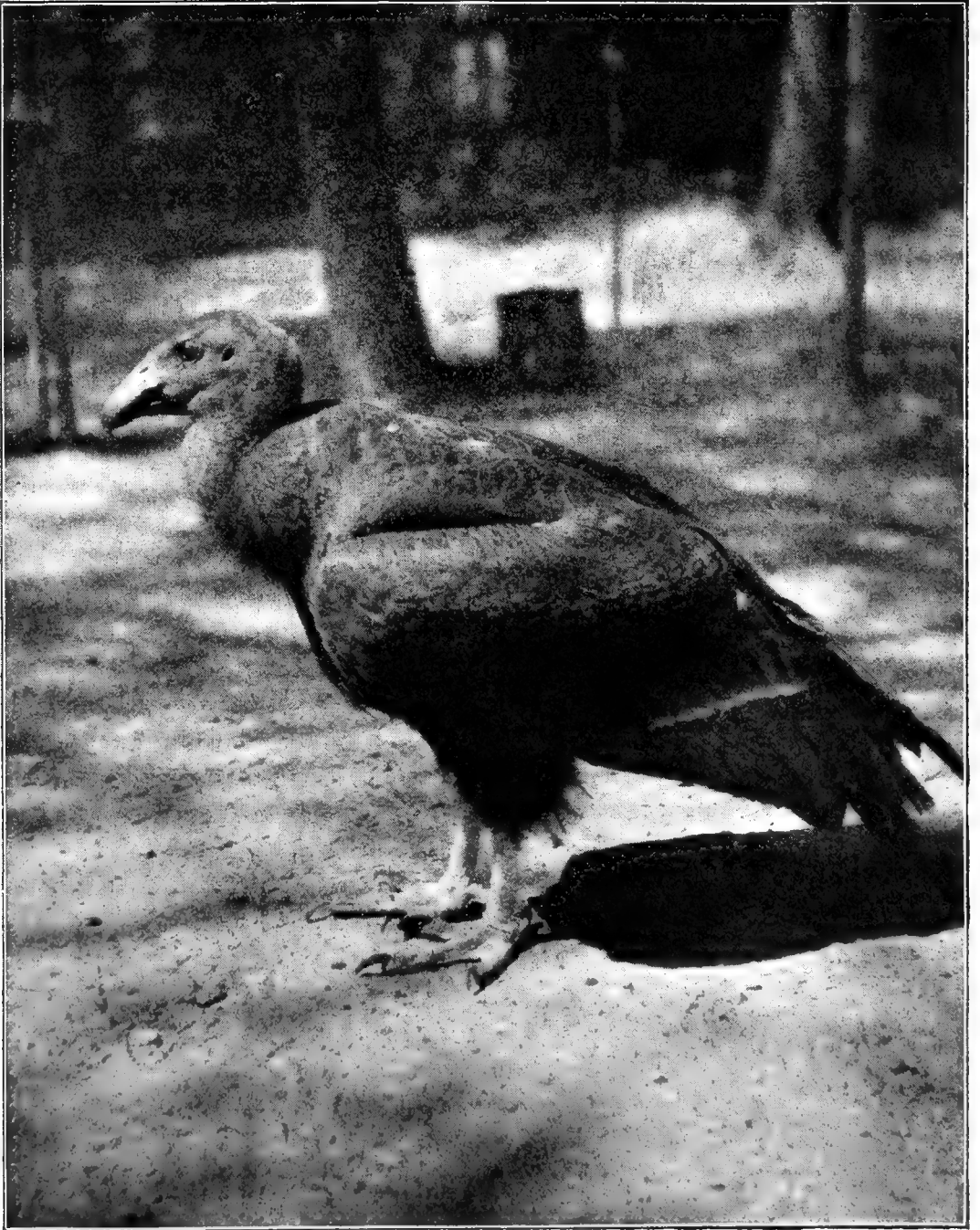
An armistice seems to have been declared in the wordy conflict that has been going on for the last few months in magazines and the daily press concerning the Burroughs-Seton-Long controversy. While many may regret that this issue was ever brought before the public, it cannot but have a good influence on future bird literature. There certainly is enough truth that is of interest concerning bird life, without resorting to fairy tales and flights of imagination. Stories and even entire books based wholly on the imagination in place of observation are more than the public can submit to, and the controversy above referred to will probably have its effect in assuring the public of more accurate, even though it be less interesting reading. Fairy tales when sold as such, have their proper place, but when intended for a history of birds or animals, are no more to be tolerated than would be inaccurate geographies or other school books.

July is probably the best month in the year for obtaining good photos of young birds. Provided that you can catch them, young birds after they have left the nest make much better pictures than those which have not yet flown. They show the family characteristics to a greater extent and are not so apt to look scared or as though they were about to fall off the limb.

We have already received a large number of photos for our competition and assurances of many more. Prints may be on any paper except blue print and no one is debarred from competing.



GREAT BLUE HERON (*Ardea herodias*)
At the top of the Flying Cage, National Park, Washington, D. C.



CALIFORNIA VULTURE (*Gymnogyps californianus*.)

NATIONAL ZOO BIRD ITEMS.

By JOHN W. DANIEL, Jr., with photographs by the Author.

Ornithologists visiting the National Zoo at Washington are afforded the opportunity of viewing two fine living specimens of the California Condor (*Gymnogyps californianus*). When first received at the Zoo, both birds were immature, but have now attained full growth, and are splendid examples of the rare and interesting species they represent. During the warmer months, they have occupied a spacious wire enclosure on the edge of a body of woods in front of the entrance of the main building of the Zoo, where they have been the centre of attraction to visitors. They spend most of the time perched on the limbs of a tree which their cage takes in. On warm, sunny days they sometimes give the visitor a chance to see the greatest wing expanse a North American bird is capable of as they take their "sun baths." With their wings spread out rigid and motionless in the sunshine, after the manner of the Turkey Vulture, they make a very striking appearance, the white under wing coverts and axillars showing in contrast with the rest of the plumage. They are very tame and gentle, and great favorites with the keepers. At the sight of an approaching keeper with their food, if perching, they hastily come to the ground, and, with waddling strides, awkwardly follow him about as they receive meat from his hands. A lone specimen of the Black Vulture (*Catharista urubu*) occupied their cage with them and served to show the difference in size between the smallest and the largest of American Vultures. A photograph of one of the Condors is presented.

A feature of much ornithological interest to be seen at the Zoo, is a large structure of iron framework and wire, covering considerable ground and enclosing several trees. It is known as the "flying cage," and its scope is such as to allow the birds which it contains, room enough to fly freely about and to enjoy as much liberty as it is possible for a caged bird to experience. So far, it has contained only water birds, Herons, Cranes, Ibises, Storks and Pelicans. Pools of water have been provided, and the margins of these, in summer time planted with tall grasses, lending an almost tropical aspect. White Ibises feed around the edges of these pools and Herons perch high in the tree tops. The Pelicans sit in groups on limbs which project over the water, and the Cranes and Storks stride about with an air of freedom. Photographs of some of these birds are given.



SANDHILL CRANE (*Grus mexicanus*.)

BROWN PELICANS (*Pelicanus fuscus*.)

BIRD INCIDENTS.

BIRD incidents without number are constantly coming under the observation of those who are on the lookout for them, and the writer deems the following of special interest. Wrens versus Sparrows: Some time since in the early spring, a pair of English Sparrows made up their minds to take possession of a bird house in our garden which a pair of Wrens had occupied for two previous years.

Mr. and Mrs. Wren had not yet arrived, so there were none to dispute the Sparrow's right or to suspend operations. All went well and the nest was nearing completion, when one bright, sunny morning the former occupants appeared on the scene and trouble at once began. They evidently resented the action of the Sparrows in taking the house which they anticipated using for a summer residence. An indictment of evacuation was at once served and being met by a show of sparrow impudence, forcible expulsion was next in order.

Mr. Wren took up his position on the front porch of the little house, and by a series of savage attacks and much loud scolding, succeeded in keeping the pair of sparrows off, while Mrs. Wren, working with desperate determination, proceeded to tear the nest apart and carrying the materials out the little back door, scattered them in all directions. My! what a shower of hay, straw, feathers, sticks, etc. This was continued until the house was entirely cleared. Then, without delay, began the process of reconstruction. During this time the sparrows did not sit idly by and see their work destroyed, but there was a continuous battle between them, and when the action became too pressing, both Wrens would make a grand charge which invariably resulted in driving the enemy back.

By and by the new nest was finished and although bad feelings existed for several days afterward, with frequent passages at arms, the sparrows finally gave up the fight as hopeless, and Mr. Wren mounted the chimney, standing guard, and at the same time giving vent to his feelings in loud and spirited song. Of course our sympathies were with the victors.

Catbird and Cherry Stone: During one of my many rambles through the woods, I discovered the nest of a Catbird in a clump of briars and upon drawing near, found it contained four little ones. Retreating for a short distance, I stopped and watched the mother bird who was greatly excited at first, but seeing that I meant no harm to her little family, she proceeded with household matters. After giving the young ones two or three worms and other choice morsels, she brought a good-size red cherry and offered it to one of the nestlings. The little bird could not swallow it, so what did the mother do but take the cherry out of its mouth, remove the stone with her beak and feet, and then give it back to the nestling in a crushed state. This time it disappeared in a trice. The incident impressed me as being not only amusing but an excellent illustration of "bird sense."

Chippies Dividing Crumbs: While sitting under a shade tree in the yard, I observed a pair of Chippies eating two crumbs of bread. One crumb was much larger than the other, and of course the bird having the smaller one finished first. Then what? Simply this, the other Chippy at once broke his crumb in half and proceeded to place a portion of it within reach of his mate. In this way each had nearly an equal amount. Beautiful incident; well might man take this lesson home to himself; what an exhibition of love and generosity! what a different world this would be if people acted more on the principle of these innocent little birds!

Robin Feeding Young: On one occasion I noticed a mother robin and two of her young on the ground under a large pine tree. She was busily engaged in feeding them, and it did not take long to see that one of the brood was much more advanced and understood things better. Presently it began searching for food on its own account and succeeded quite well, but the interesting part was that it began to feed its feebler nest-mate in the same manner as the mother did, and continued to do so as long as I watched them. A good illustration of how closely parents are imitated, in the bird world as well as among human beings. Presently a red squirrel came down the tree, and its advent upon the scene excited the robin's ire and she immediately gave chase. The squirrel had the advantage, however, as it ran around the trunk in spiral fashion, while the robin was obliged to keep poised in the air. Soon after this latter incident, the birds flew away.

Song Sparrow: Early one spring while strolling through a clearing close by a brook, the writer discovered the nest of a Song Sparrow in a brush pile; it contained two eggs. Upon visiting the nest again a day or so later, two additional eggs had been deposited, and upon making a third call some time afterwards, the nest contained four young. On my return trip, the mother bird was sitting on the edge of the nest in the act of feeding the young. Upon approaching closer, she surprised me by remaining there, and I advanced near enough to place my hand upon her, still she refused to leave her precious little ones, but sat perfectly motionless, with the exception of a slight quiver of the eye. She remained in this position until I had retreated a good distance from the little home, evidently to make sure that no harm was intended. Here indeed was a striking instance of the protecting care and filial devotion shown by our birds towards their young.

BERTON MERCER.

DOVEKIE.

A. O. U No. 34.

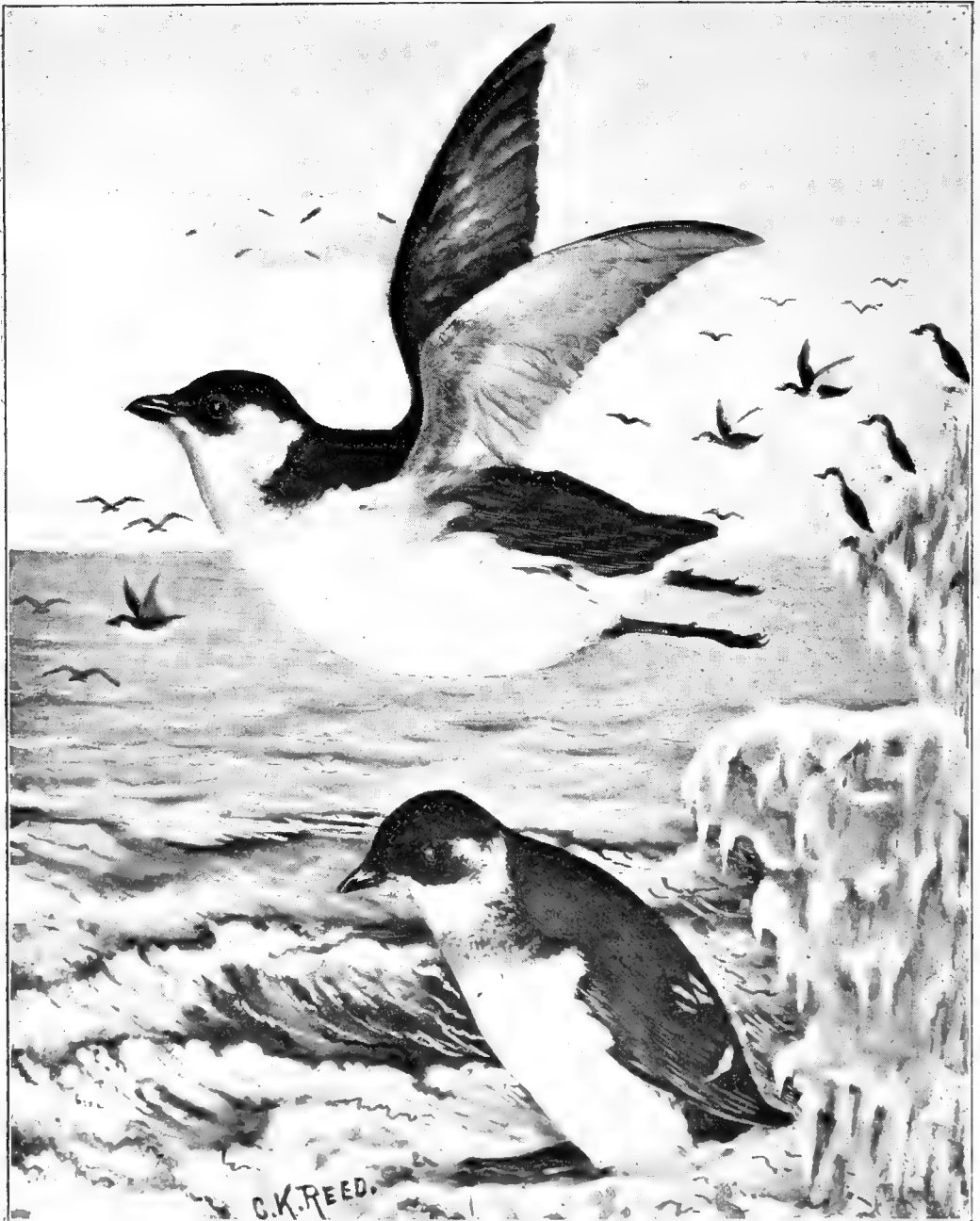
(Alle alle.)

RANGE.

Breeds on the coasts and islands of the extreme North Atlantic, and winters on the Atlantic coast as far south as New Jersey. Sometimes, but rarely, found inland where they are driven by severe storms.

DESCRIPTION.

Length, 8.5 in.; extent, 15.5 in.; tail, 1.5 in. Eyes, brown; bill and feet, black. Adults in summer:—Upper parts, head and neck, black; under parts, white, with the longer feathers of the flanks sometimes

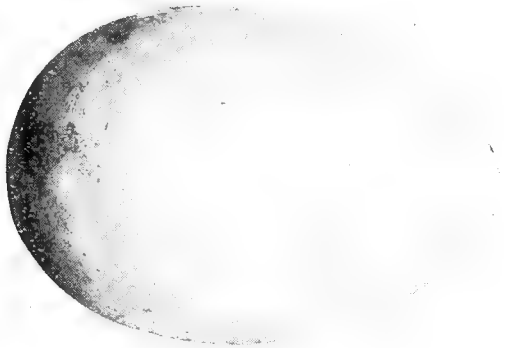


DOVEKIE.

tipped with the black; scapulars edged and secondaries tipped with white. In winter:—White of the under parts extends to the bill and on the sides of the neck. The young are similar to the winter adults.

NEST AND EGGS.

These birds are very abundant in their breeding grounds on islands in the Arctic Ocean, where they deposit their single pale blue eggs among crevices in the rocks.



HABITS.

These pretty little birds, the smallest of the true family of the Auks, are known also by the names of "Ice Bird" and "Sea Dove." They are so entirely sea-birds that they are only seen on land or in the vicinity of the shores during breeding season. At other seasons, except during severe storms, they are found fifteen or twenty miles from the nearest land. They are the most numerous of the northern birds and it is said that in some places millions of them breed, they being so numerous as to dot the water and floating ice as far as the eye can see, and darkening the sky when they take wing.

They are veterans in marine navigation and safely ride over the tops of the highest waves, or else meeting them as they come, plunge boldly into them, emerging on the other side. At times, active as they are, they are unable to combat the severe storms and either perish by drowning or are driven far from their chosen homes and, thoroughly exhausted by the long flight, perish on inhospitable shores.

Their food is composed mainly of small crustacea. These they procure either on the surface of the water or by diving; they are experts in the latter art and are able to remain under water for two minutes or more. Their flight is very swift and is made at a low elevation. They are able to walk about on the land with ease, walking upright as do other members of the family, and supporting themselves on the whole tarsus.

PRACTICAL JOKES AMONG BIRDS.

Connected with one of the large western cities is a beautiful park. In this park are kept a great many birds and animals. Of course there are various large and small cages, and sometimes the birds and animals are bunched together. In almost every instance the creatures dwell together in perfect harmony.

In one large, airy cage were kept two magpies (a male and female), a parrot, a crow and a pine squirrel. The park keeper and crowds of visitors have had a great deal of amusement in watching the antics of these creatures. They were always playing practical jokes upon each other. Everyone knows what natural thieves the magpies are. They will pilfer everything that can be carried away. After stealing all sorts of little articles, the magpies will carefully hide them away somewhere. They are like the wood-rat in their thievish propensities. Everything will be carried off and hidden whether or not they are of any earthly use to the animals. Apparently they steal just out of pure mischief.

The two magpies in the cage were constantly up to all sorts of tricks. Generally these pranks were played at the expense of the old crow. The crow had a great habit of burying a part of his food; all that he could not devour at one time, was carefully hidden away for future need. True to his instincts, the crow in the cage did this; then his troubles began. The mischievous magpies would stealthily watch the crow and discover where he *cached* his food treasures. Then, when he was dozing away, or not closely observing, the thieves would sneak over, dig up what *corvus* had hidden, carry it away and secrete it elsewhere.

When the crow would look for what he had buried he could not find it. Now the magpies would have their fun. They would slyly watch the crow, and greatly enjoy his puzzled discomforture. He would go looking about with a wise mystified air; this would set the scoundrelly magpies to screaming and chattering in glee. Finally one day the wary old crow nodded with his eyes open, and that was the way he caught the two thieves. He quietly resolved on retaliation, though, at the time of discovery he gave the magpies a good thrashing. After this, there was no end of fun among the cage inmates. The magpies had to sleep and while they snoozed the crow got even. He would see where the magpies had hidden their stores, and would dig them up and hide them. Then the magpies would look and were puzzled, and the crow would have his quiet chuckle in one corner. From day to day this hide and seek game went on, but the crow held his own against the two pirates.

This sport helped to demoralize the pine squirrel. At the beginning, the little fellow seemed honest enough, but witnessing the general thieving, the squirrel took a hand. He began to steal and hide things belonging to both magpies and crow. This three sided game greatly complicated the war.

Both the crow and magpies were fond of bright, brilliant things, and to add to the sport, the keeper would often toss into the cage little objects that attracted the bird's attention. This increased the general pilfering and the lively little squirrel became an expert and confirmed thief, though he did not take sides. All this was very funny for the parrot. From her high perch polly watched the proceedings, sometimes with the gravity of a judge. She never deigned to take part, for that was below her dignity. However, now and then the parrot would chuckle, chatter and scream like a fiend at the four arch-conspirators, when the game got pretty warm.

Practical jokes generally end badly, so they did in this cage. War was finally declared between the crow and the magpies growing out of their thieving reprisals. From fun they fell to fighting, and this continued bitterly until the birds lost nearly half their plumage. So the keeper was finally obliged to separate them. The pine squirrel remained with polly. The magpies were placed in a cage with some guinea pigs and white mice, while the old crow was exiled among a flock of wild geese and ducks.

Among their new associates, the magpies and crow had no incentive to practice dishonesty, while the pine squirrel, having no companion but polly, ceased further pilfering.

J. MAYNE BALTIMORE.

A PARASITE.

BY FRANK H. SWEET.

There are few things in nature which seem utterly worthless without a single redeeming quality to stay our condemnation. There are cowardly animals, and cowardly birds, and cowardly insects; and dangerous and destructive ones, too. But if we watch them closely, there are almost invariably some traits which commend themselves to us, goodness to their own, perhaps, or some tribal or family sense of honor or chivalry. Rarely is anything found in which even a lenient judgment cannot find something to commend—or, at least not to condemn.

But the cowbird, the parasite of the feathered world, seems in every way worthy of the unenviable distinction. Of all the American birds

it is perhaps the only one which has absolutely nothing to commend it to our admiration. It is mean and insignificant looking in appearance, has no gifts of song whatever, and in its marital and domestic character is thoroughly bad. Polygamous and utterly irresponsible for its offspring, this bird forms a striking contrast to other members of the bird world, and indeed is almost an anomaly in the animal kingdom. During the breeding season, with the true instinct of the skulker, an unnatural mother cowbird may be seen stealing among the trees and shrubbery, seeking for nests of smaller birds who are unable to protect themselves. It rarely imposes upon a bird of its own size, but selects in a cowardly manner a small nest, as that of the vireos or warblers or chipping sparrows, in which to place a surreptitious egg, leaving the hatching and care of its young to the tender mercies of some already burdened little mother.

In many cases, in order to insure proper attention to its own offspring, it destroys the eggs already in the nest, by pricking them so that its own egg alone is finally hatched out. But in case the other eggs are left intact, so strangely does nature seem to connive with the interloper, the egg of the parasite almost invariably hatches a day or two sooner than the rest, and the big, clumsy baby cowbird soon grows sufficiently strong to crowd the legitimate family out of the nest. The wit of the smaller birds is, of course, sometimes equal to the occasion, and when a cowbird's egg is deposited in the newly made nest they immediately build a false bottom or platform over the obnoxious egg and leave it to rot while the legitimate brood is hatched in peace. The larger birds, such as the robin or catbird, make short work of the unwelcome addition to their store.

But how great an instrument of destruction the cowbird proves itself to be, may perhaps be estimated when it is remembered that it commences operations early in April and that in late June, at the close of the nesting season, it is almost impossible to find a nest of one of the smaller birds that has not been visited by some member of this ubiquitous pest. And the ungrateful young cowbirds have the family trait. As soon as they are able to go roaming, they desert their foster-parents and join a flock of their own kind.

If the shiftless cowbird does not find a convenient nest, rather than build one of its own, it will drop its eggs upon the ground, trusting them to fate, or worse yet, devouring them.

Why do the smaller birds tolerate the presence and parasitical operations of the cowbird? This is one of the inexplicable problems of nature. A naturalist states that he once watched a pair of bluebirds for days disputing the possession of a hole in a post against all comers.

Big hairy woodpeckers, high holes and even bronze grackles, were driven off with a vigor which could hardly have been expected from so gentle a bird. Later, when housekeeping operations commenced, he found that the nest contained four pretty blue eggs; but visiting the nest again about a week later, he found only one bluebird's egg, and that so pricked that it would not hatch, and accompanying it, three healthy cowbird's eggs which the mother bluebird was carefully guarding. The cowbird in each case must have either driven the mother bird off the nest or have taken advantage of her feeding time to deposit the eggs. But even so, the previous conduct of the bluebirds left no room to doubt that they were perfectly capable of guarding their nest against the intruder if they so desired.

That the smaller birds are perfectly aware of the obnoxious nature of the cowbird's egg is proved by their trouble on some occasions to rid themselves of it. Why then do they tolerate the cowbird at all? Is the explanation found in the fact that the cowbirds go in flocks and hence overawe opposition? Or do they render some service in the bird world, as for example sounding the first alarm in the presence of danger? Or is it possible that they take advantage of the night time to lay their eggs? Or have they in themselves the power of inspiring fear and terror which disarms opposition? What purpose does their existence serve? Who knows?



Identification Chart No. 18.

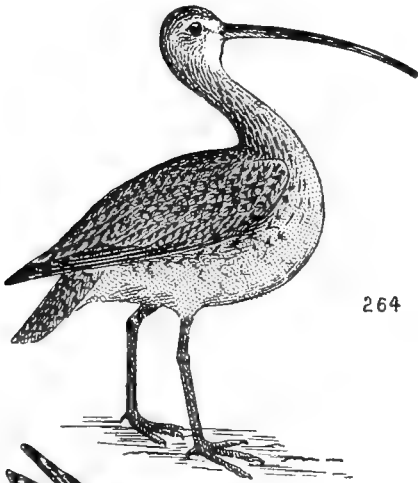
WADERS.



225.

No. 225. American Avocet, (*Recurvirostra americana*).

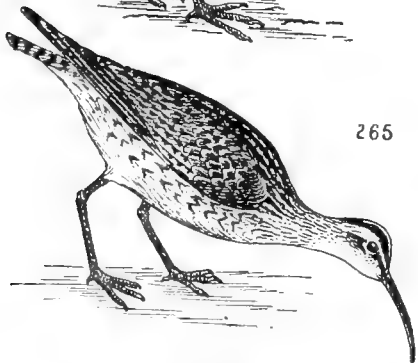
Temperate North America, chiefly in the middle and western parts rare in the eastern United States. Length about 18 in. Bill curved upwards. Upper parts chiefly white, changing to chestnut brown on the neck, breast, and head, with the exception of around the base of the bill, which is white. Scapulars, middle wing coverts, and primaries black. In winter the head and neck are ashy or grayish.



264

No. 264. Long-billed Curlew, (*Numenius longirostris*).

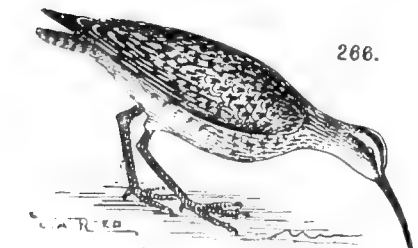
Summers in temperate North America and winters in Cuba and Guatamela. Breeds in most of its North American range. Length 24 in. Bill measuring from 4 to 8 inches in length and much decurved. General plumage washed with rufous of more or less intensity top of head, neck, back and wings variegated with black and rufous under parts streaked with dusky and sides marked with arrow heads.



265

No. 265. Hudsonian Curlew, (*Numenius hudsonicus*.)

Found throughout North America. Breeds in the far north and in winter migrates south of the United States boundary. Length about 18 in. Bill from 3 to 4 inches in length, and curved as in the former. Pattern of the markings about the same as in the former species, but with none of the rufous coloration below and little of it on the upper parts.



266.

No. 266 Eskimo Curlew, (*Numenius borealis*.)

Eastern parts of North America, breeding in the far north and wintering south of the United States. Length about 14 inches. Bill from 2 to 3 inches in length and little decurved. Similar to the preceding species but without any median line through the crown and more heavily marked beneath with dusky arrow heads.

No. 719. Bewick Wren, (*Thryothorus bewickii*).

United States east of the Plains and south of the northern tier of states. Rare in the Middle States or New England. Length about 5.5 inches. Upper parts brownish gray; wings barred with black; middle tail feathers brown, barred with black; outer ones white, barred with black. A prominent white superciliary line. Under parts grayish white.

No. 719a. Vigor Wren, (*T. b. spilurus*).

Is a western form of the Bewicks Wren.

No. 719b. Baird Wren, (*T. b. bairdi*).

Is a form that occurs in the middle and southwestern portions of the U. S. It is scarcely distinguishable from the eastern form.

No. 721. House Wren, (*Troglodytes aedon*.)

Eastern United States from southern Ontario southwards. Length about 5 inches. Upper parts grayish brown, lightly barred on the wings, back, and tail with dusky. Below grayish or brownish white, barred with dusky on the flanks.

No. 721a. Parkman Wren, (*T. a. parkmanni*).

Pacific coast of northern California to British Columbia.

No. 721b. Western House Wren, (*T. a. arctecus*).

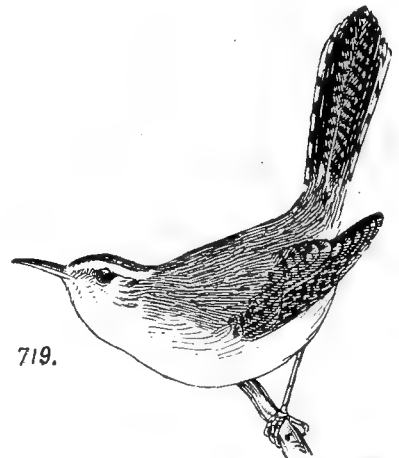
Western United States. Both of these latter two species are described as paler than the eastern bird and with relatively longer wings and tails.

No. 722. Winter Wren, (*Troglodytes hiemalis*).

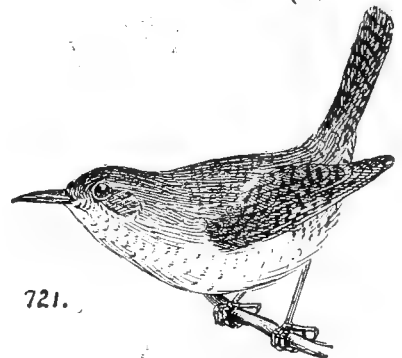
Eastern North America, breeding from northern United States northwards, and on the higher mountains south to Carolina. Length about 4 inches. Tail very short. Above brownish, almost reddish brown on the rump, wings and tail, and parts of back barred with dusky. Below brownish shading to grayish or whitish on the throat, and conspicuously barred with dusky on the flanks.

No. 722a. Western Winter Wren, (*T. h. pacificus*).

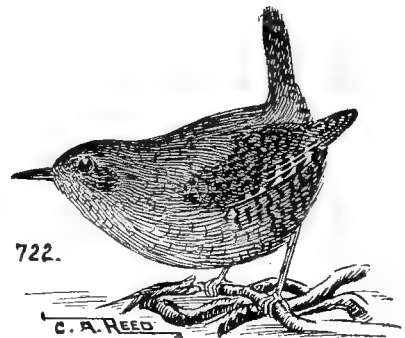
Pacific Coast from Alaska southwards. Slightly darker than the eastern Winter Wren, but hardly distinguishable from it.



719.



721.



722.

C. A. REED

BARRED OWL.

A. O. U. No. 368.

(Syrnium nebulosum).

RANGE.

Eastern United States from Nova Scotia southwards. West to the States bordering the western banks of the Mississippi River. They breed throughout their range.

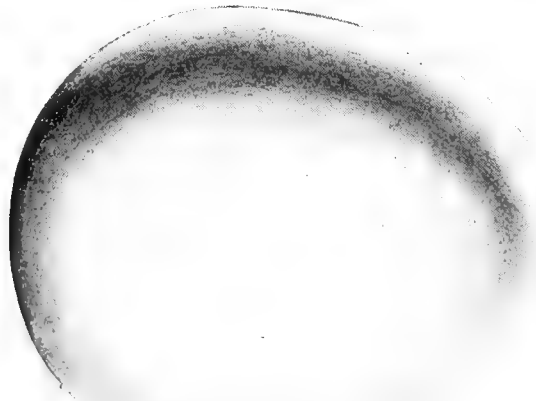
DESCRIPTION.

Length about 18 in.; extent 45 in.; tail 9 in. Eyes very dark brown. Wings broad and rounded; tail rounded. Feet feathered to the toes. Upper parts brownish gray, barred with whitish or tawny; under parts whitish, the breast and throat barred with dusky and changing abruptly into brownish stripes on the belly. Facial disk gray with concentric dusky rings about the eyes, and bordered with a mixed black and white specked band. As with the other owls, they perch generally with two toes in front and two behind.

No. 368a. Florida Barred Owl (*S. n. alleni*) is a darker race of the Barred Owl and is found in Florida and very abundantly in Texas.

NEST AND EGGS.

Barred Owls nest from the latter part of February until early in May. Their nest is occasionally a deserted one of some of the hawks or crows, but more frequently they deposit their eggs in the hollow cavity of a tree. The same tree will be used year after year frequently in the face of continued persecutions. They lay two or three globular white eggs.





BARRED OWL.

Photo from life by Chas. W. Long.

HABITS.



With the possible exception of the Screech Owl, the Barred Owl is the most common member of the family in the eastern part of the United States, and without any exception they are the most noisy. As is the case with other owls, this one does the greater part of his hunting at night although he can see equally as well during the day time and especially during cloudy weather, is frequently found flying about then. In all probability it is not so much a regard for their eyes that induces them to be birds of the

night as it is their nerves. All feathered creatures regard them as foes, and should one show himself in the daytime he is persecuted for hours by all the birds in the neighborhood. To escape this they remain hidden in some shadowy retreat in the depths of the woods, from whence they come at dusk to quietly drop upon their unsuspecting prey, whether it be bird, animal or reptile, without the necessity of an exciting chase.

The flight of the Barred Owl is very easy and, at times, very rapid, although the soft texture of their feathers makes the sound of the beating of their wings inaudible. They are usually solitary, and, except during the mating season, it is not common to find more than one of them in a locality. Their canny cries may be heard at all hours of the night in places where there is extensive timber land. Their voice at times has a very human sound, and it has frequently brought terror to the hearts of unfortunates who have been alone in the depths of the woods at night. Their cry ranges from several different interpretations resembling "hoo-hoo," several times repeated, to a wild burst of demoniacal laughter.

They are now regarded as semi-useful birds; that is, they destroy a small per centage of poultry or birds useful to man, while the obnoxious rodents form quite a large percentage of the diet. They are also fond of fish, which they catch by jumping into the water and seizing with their talons. They are quite valorous in the defense of their nests and young. While they do not attempt to strike the intruder

with their talons, they will dash so close to him that he is frequently hit by the soft wings and involuntarily dodges, fearing the sharp talons with which he knows they are armed. When the female is incubating she will generally remain on the nest and allow herself to be removed by force, after which she will perch close by and express her disapproval by snapping her bill, making a very impressive clicking sound, not unlike the forbidden snapping of fingers with which school boys were wont to attract the attention of the teacher.



Photo from life by C. A. Reed.

Barred Owls are the most easily tamed and docile of all the members of the family. I have handled a great many of them, and have never seen but one that would make any attempt to grasp me with his talons. This one was a very lively, playful bird, and if you attempted to



Photo from life.

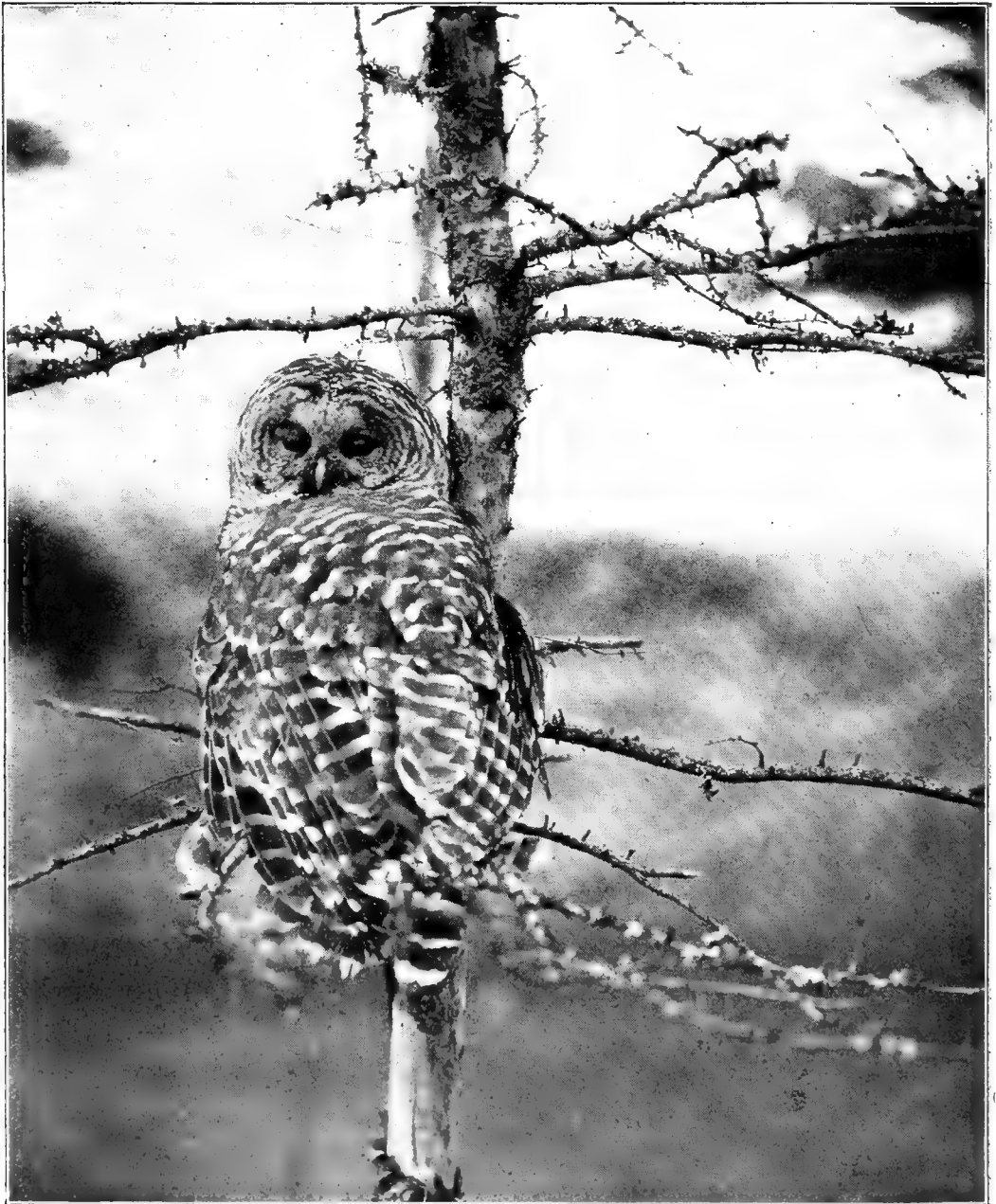


Photo from life by Chas. W. Long.

BARRED OWL.

stroke his breast would reach out his claws much in the same manner as a cat will. If you drew your hand away of course an ugly scratch would result, but not from any design of the owl, for if the hand was allowed to remain he would not attempt to pinch or scratch. When in captivity they bathe as do other birds, by standing in the middle of the dish and splashing the water over them with their head and wings. It is probable that they go through the same performance when they are at liberty, although probably few, if any, ever saw them. They drink after the fashion of the barnyard fowls; filling their bill with water and then turning their face skyward and rolling their eyes in the most ludicrous way.

The only sounds or signs of anger that they show is the loud snapping of the beak. As they sit dreamily on their perch, with their eyes half closed, they are aware of everything that takes place about them, and their very large ears catch every sound. I have often crept quietly up behind one when he was apparently asleep, and clapped my hands loudly. Not a movement showed that he had any nerves. He slowly unclosed his eyes and deliberately faced about, and his great black eyes seemed to express amusement that I should have tried to startle him. On the other hand, a slight scratching, as of a mouse, would awaken him instantly, and he would watch intently to see the anticipated rodent appear. All his actions are either slow and deliberate or else so quick that the eye can hardly follow them. As you walk about one, without shifting his body in the least, he will turn his head to watch you until it has made nearly a complete revolution. From the extreme position on one side to the extreme position on the other an owl can make nearly two complete revolutions of the head, whereas a human being has to exert himself to make even half a revolution.



It is to be hoped that farmers and sportsmen will cease killing the large numbers of these birds that they do every fall, as undoubtedly they do their share of good for the community. Probably the greater part of the destructive work that is charged to them is that of the great horned owl, and even that could be avoided if farmers would take care to properly house their fowls at night.

THE ORIOLE FOSTER-PARENTS.

About my next door neighbor's house and mine are numerous Norway spruces. These trees are tenanted by different birds at different seasons.

During the cold winter the bluejays hold full sway, there being no other houseseekers but the English sparrows which soon seek other sites.

At this season the jay is more welcome, perhaps, than at any other. We like to see its blue and white plumage against the green of the tree, and to hear its shrill call. No day seems too cold for this pert-looking visitor to be out and ridding the trees of unwelcome pests, the eggs and larvae of insects.

Suddenly, some afternoon, just as the spring is approaching, we hear a commotion in the trees. We know the grackles have come! Yes, there they are. They have come in large flocks. How delighted they seem to be. Such tilting, swaying and balancing! Such chattering! Later as the season advances come the warblers and many others.

One day, during the first week in July, a member of our family picked up a young bird that had evidently fallen from its nest. He carried the bird home, a distance of about two miles. I recognized it as a young Baltimore Oriole. We put it into a bird cage upon some dry grass, and dropped tiny bits of bread, fruit, insects and worms into its mouth when it opened it, as it did nearly every time we approached the cage.

During the second day of its enforced visit we placed the cage upon the walk near a flower bed. We sat near enough to see but not to be seen, on a porch and watched it. Occasionally it gave a few short "peeps" which gradually grew more sharp. Like a flash of flame came an adult Baltimore Oriole from the spruces! It hovered about, then lit on a low branch of a Balm of Gilead, then darted off. In a few moments it appeared again only to fly away once more. Soon it flew back with a worm in its bill. It flew to a twig then to the ground near the cage. It hopped up to the cage, flew to the top of it, held the worm down between the wires and fed the little one. Then it darted back to the spruces. The little one was all a-flutter. Again the oriole appeared to feed the little one and fly away. Soon came another old oriole. They kept coming, alternately, for two hours or more. Once one of them flew in at the open door fed the bird and flew away. At sundown they ceased to come. Our little bird put its head under its wing, apparently to go to sleep. We took the cage into the house for the night. Sometime before morning it died. The old birds did not come back again to the garden.



Address communications for this department to
 MEG MERRYTHOUGHT, 156 Waterville Street,
 Waterbury, Ct.

DEAR YOUNG FOLKS:

The long list of birds which still come in, are of value in showing the greater interest taken in bird-lore by children everywhere. Joseph E. Jeffery, of Sioux Rapids, Ia., has identified 118 birds in 1902. Lewis Gannett thinks to put Massachusetts, Ohio and Pennsylvania "down" by his list of *one hundred and fifty-nine* birds seen in one year. Where are our Connecticut boys? we do not want to see them left behind when powers of patience and accuracy are being tested. I think any of us would be delighted to make the acquaintance of all the different birds which have been seen by Mr. Cyrus Carlton, of Providence, R. I., during the last two years. He sends us a list of *two hundred and five* birds identified during that time, also a list of one hundred and forty-seven birds identified in Florida since Jan. 2, 1903.

One of our readers in New York State speaks of the scarcity of warblers this year. The number which have called on us here in Connecticut on their way to their summer homes in the North, has been much smaller than usual. It may be they have travelled by a different air-line route this year, or perhaps the cold weather in the early part of May so delayed their arrival that they hurried past us.

Many of the birds in this section came at least a week later than usual. We are sure that one bird will reach us on the proper date—and the American Eagle will be in evidence on July 4th. Up with your flags, boys and girls, and roll your echoing cheers across from ocean to ocean.

Cordially your friend,

MEG MERRYTHOUGHT.

ANSWERS TO JUNE PUZZLES.

BIRDS THAT TELL THEIR NAMES.

No. 6, Chebec or Least Flycatcher. No. 7, Chewink.

NUMERICAL ENIGMA.

Baltimore Oriole.

AN ENIGMA.

Crow.

CHARACTERISTIC INITIALS.

Bob White, Northern Shrike, Baltimore Oriole, Song Sparrow,
Meadow Lark, Mourning Dove.

HOUR GLASS.

Robin.

H U R R Y
B O Y
B
P I E
C A N D Y

WHAT IS ITS NAME?

Ruby-crowned Kinglet.

ROLL OF HONOR.

Lewis Stiles Gannet, Rochester, N. Y.; Eunice Joslin, Webster, Mass.; Wm. Schneider, La Crosse, Wis.; Louise Jordon, Defiance, Ohio; Stafford A. Francis, Exeter, N. H.; Samuel D. Robbins, Belmont, Mass.; Lillian M. Weeks, Marietta, Ohio; Gerald B. Thomas, Livermore, Iowa; Isidor Rehfuss, La Crosse, Wis.

EXTRACTS FROM OUR MAIL BAG.

One day in April I was walking through the woods when I heard a sharp chatter, and looking up I saw a squirrel looking out of a Flicker's hole in a dead tree. On climbing up, I found five young squirrels and as I was climbing down I noticed another hole just below this one. The minute I put my hand in the hole I received a sharp nip, and on withdrawing my hand I was surprised to see a Saw-whet Owl. She had such a tight hold on my finger that I drew her clear out of the hole, when she flew off with a great snapping of her bill. In the nest I found

five little owls, hardly bigger than an English Sparrow and all covered with white down.

In a hollow stump at the foot of the tree I found the male bird with a field mouse in his claws.

GERALD THOMAS,
Livermore, Ia.

I found a Kildeer's nest this spring. There was not much of a nest, and what there was was right down on the ground, not in the grass or against a tree or bank or anything. It contained four pointed eggs, which were gray speckled with dark spots and blotches. I did not see anything of the young birds, and I did not know whether they left the nest as soon as they hatched or not.

LILLIAN M. WEEKS,
Marietta, Ohio.

I went off into the woods the other day and got a stump with an old woodpecker's nest in it. I brought it home and fastened it to a post with some long screws, for the chickadees. I should not wonder but what the blue-birds will move into it after the first brood or at the beginning of next year. They go to it and inspect it quite often, and the other day they drove off a pair of chickadees who were investigating the place.

Near my home is a robin's nest, and the young ones hatched almost a week ago (May 1st).

STAFFORD A. FRANCIS.
Exeter, N. H.

We heard a note, loud and guttural, that none of us had ever heard before. We raced to the river bank, and there not far from us were three crows chasing an American Herring Gull. It was the Gull which uttered the note, and he evidently did it without opening his bill, for he had a fish in his mouth.

I investigated a crow's nest and saw three large eggs in it. Not until I reached the nest did a crow appear, but by the time I reached the bottom there were twenty-six ready to peck my eyes out, and by the time I had finished counting them there were twenty-nine.

I think I'll put Mass., Ohio and Penn. down by sending in my lists. In my life I've seen one hundred and seventy-four, and starting May 13, 1902 and ending May 12, 1903, I've seen one hundred and fifty-nine, setting up something better than one hundred and sixteen. In 1903 I have seen one hundred and nine already.

Hoping Massachusetts will beat Ohio and take second, though not first place, I finish my lists.

LEWIS STILES GANNETT,
Rochester, N. Y.

On May 3rd I saw a nest and climbed into a tree to look in. There were three eggs in it and by their color, I knew it was a Robin's. I walked a little farther along on the road, and soon saw a Robin sitting on a nest that was so near to the electric car that ran along the road, that it seemed as if one were in the car that one might touch her.

I have taken the American Bird Magazine for a long time, and I look forward to the first of each month, the time when it comes.

LESLIE BRADLEY,
Boston, Mass.

On a bright and sunny morn,
In the merry month of June,
I walked along the brookside,
And I heard the Blue-bird's tune.

I listened to the Robin,
And heard the Oriole's song;
The twitter of the Sparrow
Seemed to cheer the world along.

I saw the little Meadow-lark,
And found a rabbit's trail.
As I passed the inland river,
I saw a Sora Rail.

I saw the small Kingfisher,
Sitting by the side
Of the lonely river,
And looking at the tide.

I saw the large Blue Heron,
And the nest that she had made.
I saw the small Field Sparrow,
And the egg that she had laid.

The coal-black crow was flying
'Round the scarecrow's funny head,
In the field I passed that morning,
Near the river's stony bed.

BYRON KING, (age 12.)
Taunton, Mass.

WHAT BIRD IS THIS?

A few days ago while walking in a valley in which are several oak trees, I saw a bird which very much resembled the crow blackbird, but it was smaller and its plumage was not so glossy. The male was black except the crown of his head which was of a bronzed color. The female was smaller than the male, and of a brownish color with a light brown breast.

The male chirped somewhat like a Robin. I know this bird must belong to the blackbird family, but do not know the name, and I wish some of the readers of AMERICAN ORNITHOLOGY would tell me through this department.

JOSEPH E. JEFFERY,

Sioux Rapids, Ia.

PUZZLES.

A HIDDEN BIRD.

My first is in strap but not in halter,
 The next three you will find in falter,
 That's four, the fifth you'll find in me,
 My sixth is hidden in my skin,
 My seventh is always in begin,
 My eighth and ninth you will discover
 If you examine the word another,
 In winter, I'm as white as snow,
 Now when you guess it let me know.

ALICE GARLAND,

Boston, Mass.

ENIGMA.

I am a small bird that migrates in the spring and fall and composed of eighteen letters. My 5-1-7-8 is a well known bird, my 18-10-9-11-17-6 is a part of a train, my 16-2-5-12-4 is to be fortunate, my 3-6-7-8-14 is a color often seen on birds, my 13-14-12 is used in writing about birds, my 15-6-13-9 is an affected laugh.

SAMUEL D. ROBBINS,

Belmont, Mass.

ENIGMA NO. 2.

I am a beautiful bird composed of 15 letters. My 15-7-12-13 is what is always found in the ground, my 12-8-3 is a well known domestic animal, my 1-8-6-4 is an adverb, my 13-11-5 is what you open the door with.

STUART M. FIRTH,
South Orange, N. J.

ENIGMA NO. 3.

When nature spreads her robe of 12-14-6-13-10,
The bird no longer now a 1-8-4-3-10-12-6-14,
Builds her 10-6-1-7 'neath leafy screen,
Lest her birds from 2-3-8 in danger
Be eaten ere they 5-3-4-12-6 have grown,
And 1-2-3-4-5-6-7-8-9-10-11-12-13-14 left to moan.

MAY AGNES JOHNSON,
Kansas City, Mo.

SUGGESTED BIRDS.

What birds are suggested by

1. An evergreen tree.
2. What your mothers do at a five o'clock tea.
3. A tiny piece of fly paper.
4. A colored letter.
5. The object of many sportsmen.
6. Something sometimes used by horseback riders.
7. Something you make whenever you sew.
8. A famous nurse who was much loved.
9. An American Statesman (who is not living now).
10. Act of a thief.

GLEANINGS.

Blind nestlings, unafraid,
Stretch up widemouthed to every shade,
By which their downy dream is stirred,
Taking it for the mother bird.

LOWELL.

A new door of happiness is opened when you go out to hunt for something, and discover it with your own eyes.

VAN DYKE.

PHOTO CONTEST

FOR 1903

We have decided to divide our photo contest this year into three classes; the reason for this is that it is obviously hardly fair to judge between the merits of a photograph of an adult wild bird, a young bird, and a photo of a nest and eggs. Therefore we have subdivided the contest into these three classes.

CLASS I. FREE ADULT WILD BIRDS. These may be on the nest, feeding the young, or in the brush or field. We shall NOT, however, consider CAPTIVE birds, or birds that have been wounded, whether they be tied out of doors or photographed free in the house or gallery. Awards as follows:

1st, \$10.00 cash; 2nd, \$5.00 pair of Field Glasses; 3rd, \$2.00 cash.

CLASS II. YOUNG BIRDS. These may be photographed in the nest or placed on suitable branches; in either case take great care not to do them any injury. Awards as follows:

1st, \$10.00 cash; 2nd, \$5.00 pair of Field Glasses; 3rd, \$2.00 cash

CLASS III. NEST AND EGGS. Nests must be in the natural situations actually chosen by the birds, although of course it is permissible and desirable to tie back all branches and leaves that will mar the picture.

1st, \$5.00 cash; 2nd, \$5.00 pair of Field Glasses; 3d, \$2.00 cash.

All photographs which we retain for publication, whether prize winners or not, will be paid for at the uniform rate of 50 cents each, irrespective of the class.

All photos which we shall be unable to use will be returned to the owners.

Photos may be of any size, but 4x5 or larger are preferred. They may be made on any paper except blue print. Any one may send as many photos as they wish, and it is desirable to send in a letter separate from the photos, any interesting notes concerning their taking.

CONTEST CLOSING OCT 1.

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There is no more attractive study than ornithology, the department of zoology which treats of structure, habits, and classification of birds. The graceful forms, movements and habits of the feathered tribes have been celebrated in all ages by poets and artists, and have furnished the instructors of mankind with lessons of wisdom. But this admiration is not confined to the poet, the artist or the sage; it is universal. Wherever human beings are found, the forms, the plumage, the songs, the migrations, the loves and contests of birds awaken curiosity and wonder. No similar work containing so many beautiful and faithful pictures of living birds, and so much descriptive information, is now extant, or has ever been published, in this or any other country.

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| 1 Chippy Family (6 Chipping Sparrows). | 26 Nest and Eggs of Grasshopper Sparrow. |
| 2 Preparing Breakfast (6 Chipping Sparrows.) | 27 Grasshopper Sparrow on Nest. |
| 3 Woodcock on Nest. | 28 Nest and Eggs of Bob White. |
| 4 Nest and Eggs of Woodcock | 29 American Robin on Nest. |
| 5 Three Young Woodcock. | 30 American Robin Feeding Young. |
| 6 Ruffed Grouse on Nest. | 31 Five Young Chickadees. |
| 7 Nest and Eggs of Ruffed Grouse. | 32 Chickadee at Nest in Bird House. |
| 8 House Wren (male). | 33 Chickadee at Nest in Tree. |
| 9 House Wren (female). | 34 Brown Thrasher. |
| 10 Cedar Waxwings Feeding Young. | 35 Brown Thrasher on Nest. |
| 11 Cedar Waxwing on Nest. | 36 Wood Thrush on Nest. |
| 12 American Redstart (male) Feeding Young. | 37 Young Wood Thrush. |
| 13 American Redstart (female) and Nest. | 38 Pigeon Hawk. |
| 14 Prairie Warbler (male) Feeding Young. | 39 Bluebird at Nest Hole. |
| 15 Prairie Warbler (female) and Nest. | 40 Barred Owl. |
| 16 Red-eyed Vireo on Nest | 41 Screech Owl. |
| 17 Red-eyed Vireo Feeding Young. | 42 Four Young Screech Owls. |
| 18 Wilson's Thrush and Nest with Eggs. | 43 Young Blue Jays. |
| 19 Wilson's Thrush Feeding Young. | 44 Blue Jays in Nests. |
| 20 Chestnut-sided Warbler on Nest. | 45 Blue Jay Feeding Young |
| 21 Ovenbird and Nest. | 46 Loggerhead Shrike. |
| 22 Black and White Warbler on Nest. | 47 Phoebe on Nest. |
| 23 Field Sparrow Feeding Young. | 48 Hairy Woodpecker. |
| 24 Field Sparrow Cleaning Nest. | 49 Chimney Swift. |
| 25 Young Field Sparrow. | 50 Four Young Crows. |

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W. K. FISHER, Editor.
J. GRINNELL and F. S. DAGGETT,
Associate Editors.

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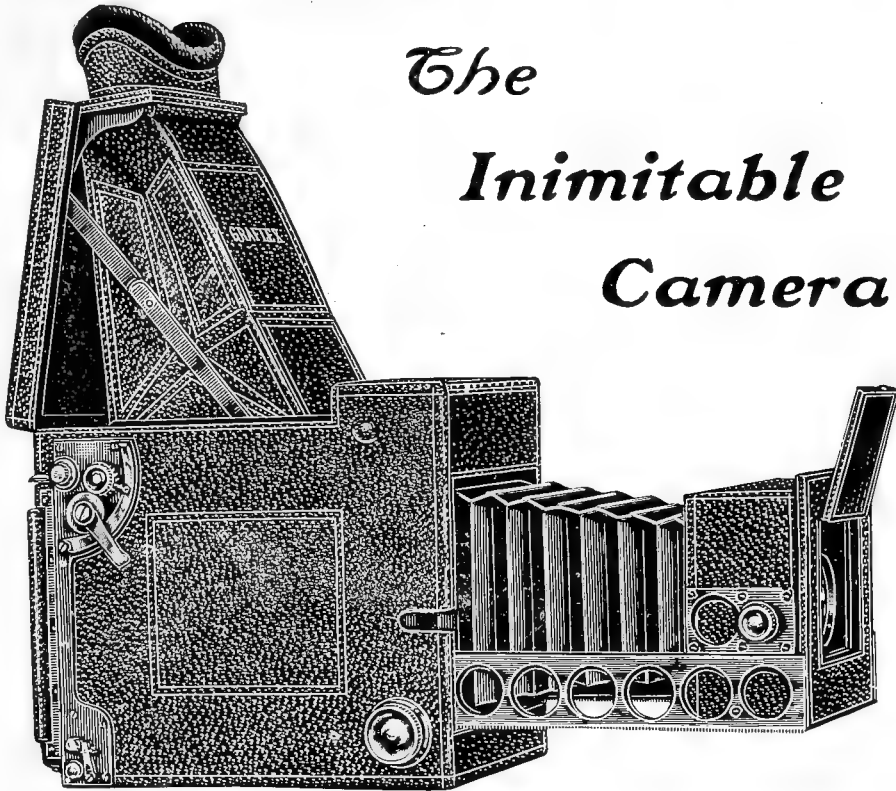
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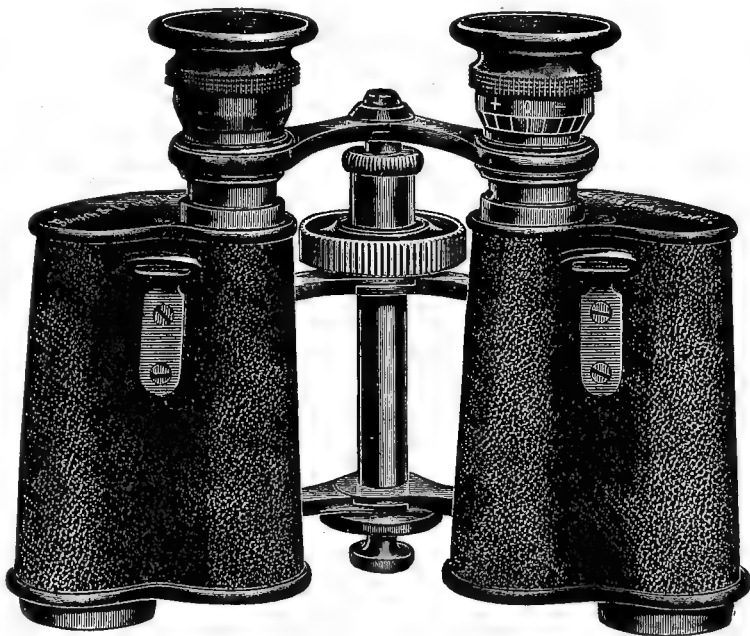
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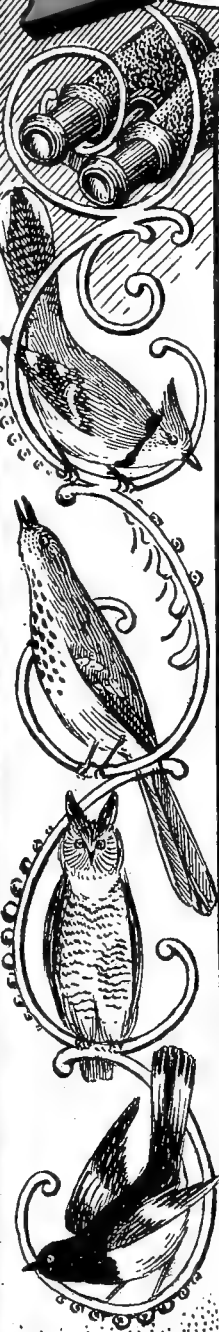
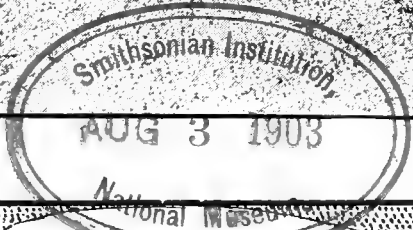
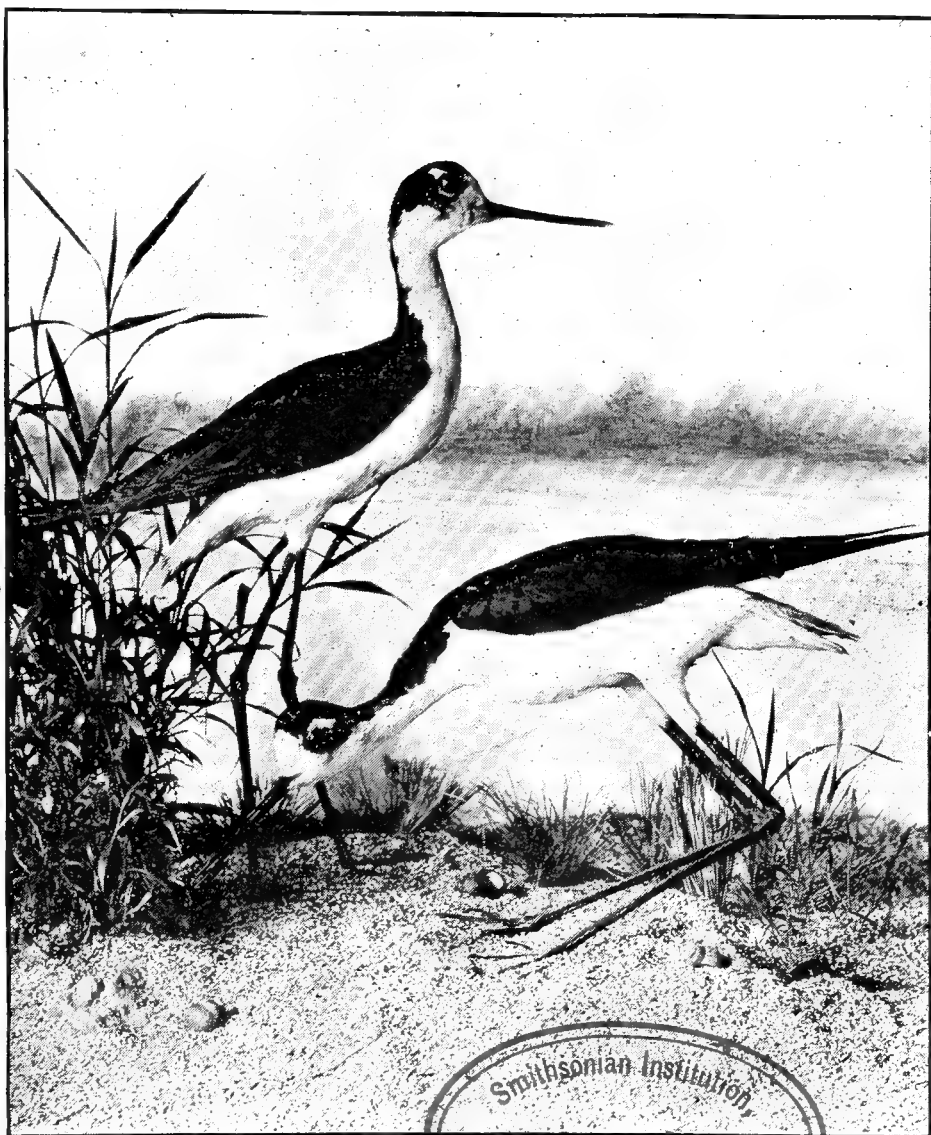
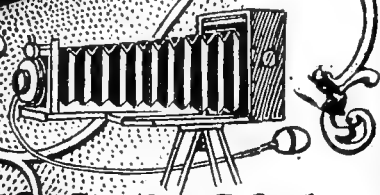
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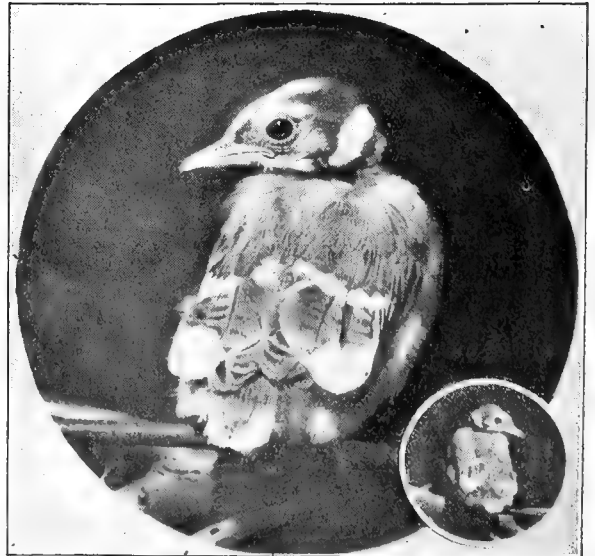


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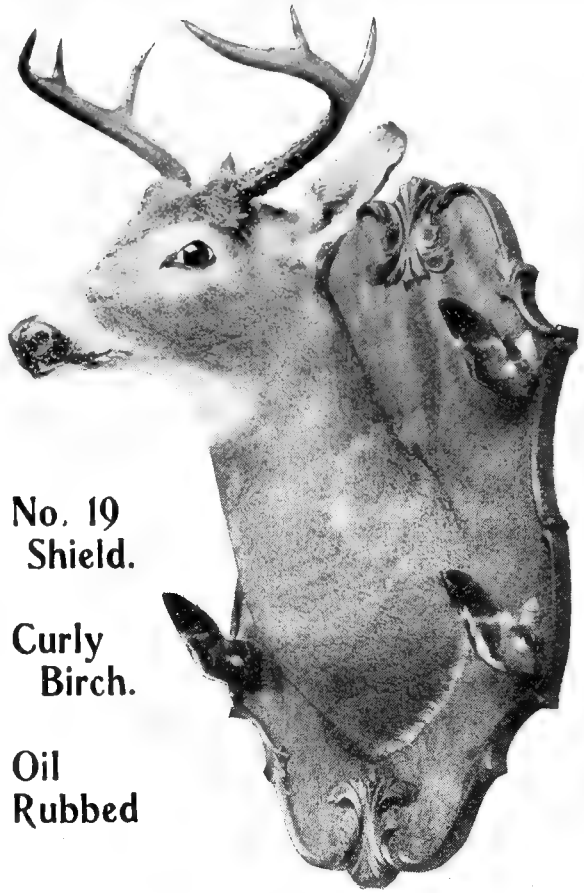


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VOL. III

AUGUST, 1903.

NO. 8

We are all glad to see sympathy extended to all dumb animals, either beasts or birds, but it is always best to be sure that you are right before you proffer your assistance. A lady brought two young Kingfishers to me. She did not know what they were but had found them beside the road while out driving and as she expressed it,—“there were no trees or woods, or place for a nest, nothing but a sand bank on one side of the road and a pond on the other. These two dear little birds were right down beside the road; they seemed hungry and there was no mother bird to feed them so I took pity on them and took them home. I have tried to make them eat, but they will not touch anything I give them.” So much for not knowing. The poor little kingfishers died within two hours after she brought them in. They had left their nest in the sand bank and were exercising their wings while waiting for their parents to return with food from the above mentioned pond, when they were found by the kind but mistaken Samaritan.

Another case.—A man this time essayed to be the foster parent. He worked in a shop from the windows of which he could see on the gravelled roof of an adjoining building. A Nighthawk had laid two eggs and hatched them on this roof although he did not know it before the young were two days old. He discovered them at this stage as they were sitting in the sun. He watched them frequently that morning and finally saw a large bird sitting on the edge of the next building.

He watched it until late in the afternoon and as it neither brooded nor fed the little ones he decided that it must have deserted them, so when he got through work he got the young ones and took them home intending to feed them and bring them up until they could fly. He meant well but the next morning they were beyond the need of further care.

NATURE, OUR COMFORTER.

Are you tired, fatigued, and weary,
Worn with business and with care;
Is your pathway rough and rugged,
And your burdens hard to bear?

Do you long for change and respite,
From daily toil and commercial strife;
Does the sterner world oppress you,
And damp the brighter side of life?

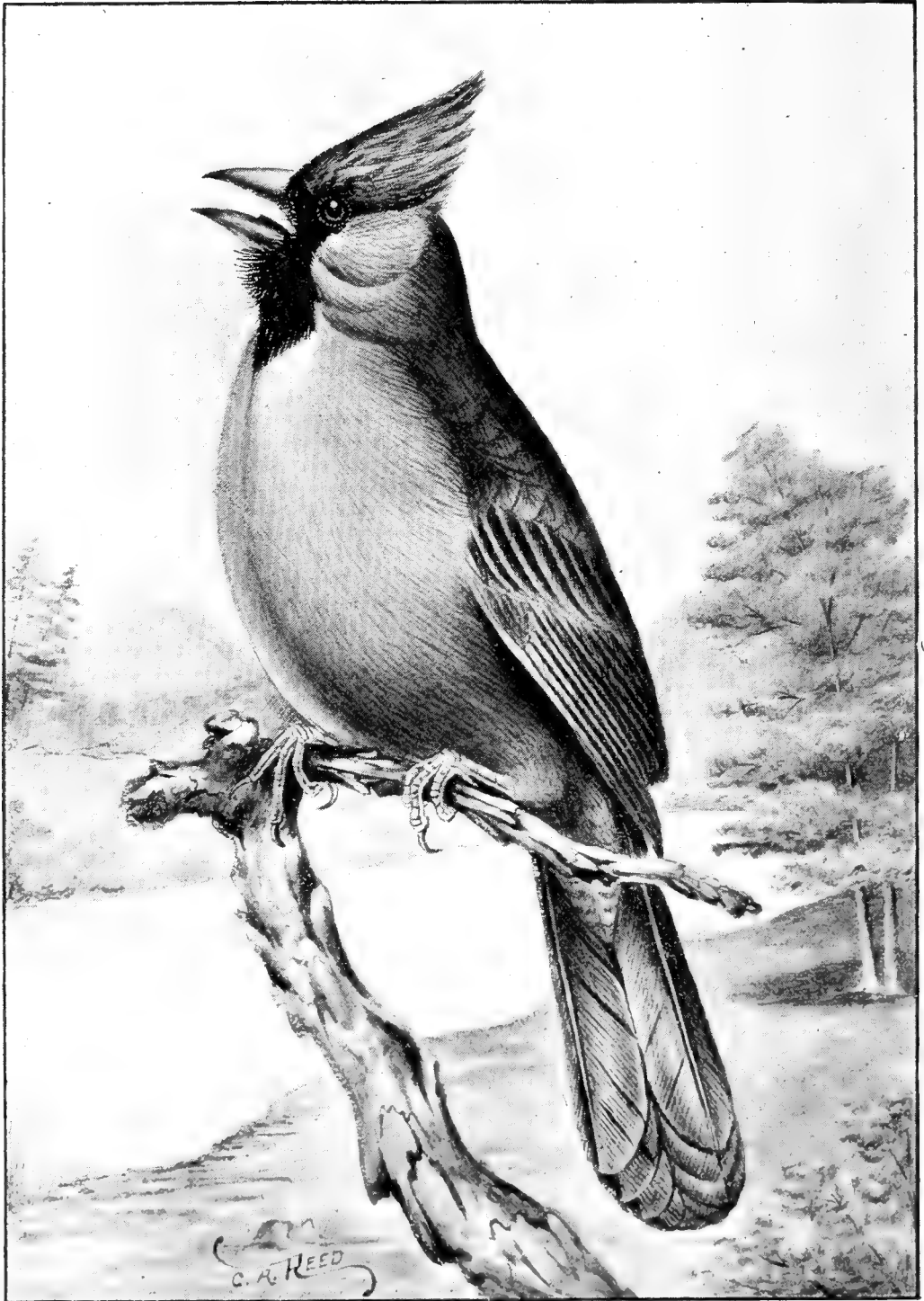
Turn then to the fields and meadows,
Stroll through the woodland, by the brook;
Listen to the voices of God's creatures,
Learn from pages of Nature's book.

There is gladness in the wild bird's song,
Some lesson in each blooming flower;
There is cheer and comfort in this solitude,
And new joy in each fleeting hour.

We feel refreshed, repaid, content,
With things thus seen and time thus spent;
New hopes are born, new thoughts arise,
Like the soaring lark in summer skies.

In Nature's world, a boundless realm,
There's wondrous beauty, wisdom, peace;
In her we find sweet companionship,
Till our earthly pilgrimage shall cease.

BERTON MERCER.



CARDINAL.

CARDINAL.

A. O. U. No. 593.

(Cardinalis cardinalis)

RANGE.

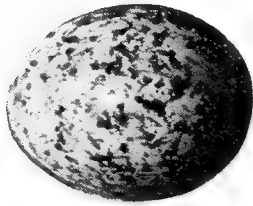
Eastern United States; north to the Great Lakes and southern New England; west to the Plains. Cardinals are sub-divided into three subspecies which are found in the southwestern parts of the United States. They are;—Arizona Cardinal (*superbus*), Saint Lucas Cardinal (*igneus*), and Gray-tailed Cardinal (*canicaudus*).

DESCRIPTION.

Length, 8.5 in.; extent, 12 in.; tail, 4 in. Eye, brown; bill, pinkish. Adult male:—Intense fiery red, sometimes vermillion and in some birds rosy; the back, wings and tail are somewhat darker and obscured with grayish. Female:—above grayish brown; yellowish brown below, tinged in places with reddish; the crest is nearly as bright red as in the male.

The first plumage of the young male is like that of the female but soon changes to that of the adult.

NEST AND EGGS.



The Cardinal nests very abundantly throughout the south. The nests are ordinarily placed in thickets not more than ten feet from the ground, although as is always the case with any bird, numerous exceptions may be found from the general rule. They have been found in brush heaps, on fence rails, on stumps, and probably do not hesitate to place their nest upon the ground if necessity warrants it.

The nest is very loosely constructed of twigs rootlets and perhaps grapevine, and is lined with a few fine grasses and sometimes horsehair. Their eggs present quite a variation in markings and also in the tint of the ground color. The brownish spots are sometimes thickly sprinkled over the whole surface of the egg and sometimes very sparsely. The ground color varies from a cream color to a pale greenish blue. They lay from three to five eggs, although the majority of sets contain four. The nesting season usually begins about the first of May.

HABITS.

The handsome Cardinals are quite abundant within the limits of their range, and they are also quite well known without their boundries too,

for they are excellent singers and are frequently met with behind the bars of a cage. While they are hardy birds and live well in captivity, they soon lose their beautiful fiery red coat and adopt the dress of the female,—a dull grayish brown color. The female, too, while not equaling the male, has a very pretty song and for this reason is often caged.

They generally live in pairs or small families in a section, where they generally remain throughout the year, except in the more northern portions of their range. In the Southern States where they are the most abundant, they are quite tame and frequent the neighborhood of the farm houses about which they generally manage to find an attractive bill of fare of various grains, fruits and insects.

In spring, when they arrive in the Middle States where they are partially migratory, numerous contests occur between the male birds before they obtain their desired companions for the season. As they are quite strong birds and have powerful beaks, these contests are frequently disastrous to the vanquished party.

Their loud, bold, defiant song is one of the most entertaining pieces of music that is heard from a feathered throat. It is distinctly a whistle rather than a song, as indeed are the songs of nearly all the birds.



NEST OF CARDINAL.

Photo by Paul R. Powell.

The notes are very varied, and while scores of listeners have tried to translate them into words, no two seem to be able to agree on what it does sound the most like. "What cheer, what cheer" seems to be the usual interpretation of the most common notes, a full, round, deep and mellow whistle. For several hours after sunrise, the Cardinal orchestra is heard in full tune; then it gradually dies down through the heat of the day, but along towards night the melody again breaks forth. A great many, especially those in the south, consider the song of these to be superior to that of any others of our birds, but of course tastes vary, and without detracting in the least from the credit due the Cardinal, I do not think that the musical ability of this species equals that of the Goldfinches (my favorites) or several others of the northern birds.



Photo by J. B. Pardoe.

YOUNG BROAD WINGED-HAWK.

ROBINS AND RED SQUIRRELS.

Columns have been written concerning the piratical expeditions of the red squirrel. Although one cannot help admiring the nerve and the audacious temperament of this little quadruped, he is ever willing to undermine your confidence in him with his unwarrantable depredations.

Not all of his advocates will admit he is a pirate. It is not my purpose to condemn the little fellow, for he is one of many of my four-footed friends. His questionable acts are but the consequences of natural laws.

Of all the tricks in which the red squirrel is an adept (those which have come under my observation) the persecution of the robin seems to be his chief delight. About my home are numerous large elms and maples, and near by, an orchard of apple trees, an ideal retreat for the feathered tribe.

The robins build their nests within a few feet of my window. The tree sparrow is also abundant; and every year a pair of bluebirds make their home in a hollow limb of an old russet tree. Although there are no nut trees near, the red squirrels have chosen this semi-sylvan retreat for a foraging ground, and it is not uncommon to see two or more racing through the tree-tops.

It was during last nesting time, about midday, that I heard an unusual commotion in the lofty tops of one of the great elms. I approached the locality to learn the cause. A half dozen robins were hopping about the tree top, uttering their short, sharp note of alarm. They were soon joined by a flock of English sparrows, and the vehement chirping which soon commenced added materially to the general rumpus. Cautiously approaching, I gained a position from which I discovered the cause of the disturbance. In a fork of one of the larger limbs was a newly built robin's nest. In the nest with his tail flattened out upon his back, sat a large red squirrel, evidently in the act of dining upon raw robin's egg omelet. The robins were justly exercised over the operation, and their expressions of anger were seconded by full throated chirps from the sparrows. It was a veritable ornithological pandemonium, during which the maurader calmly munched his omelet, and then had the audacity to curl himself up for a nap.

One immense cock robin, resplendent in his spring plumage, hopped from twig to twig, and scolded the invincible *chickaree* until his wrath overcame his usual caution. Suddenly he seemed to receive an inspiration; taking to wing, he rose to the height of twenty or thirty feet; here he poised, not unlike a hawk, then darted with great speed directly at the squirrel. Evidently his courage failed for he sheered off, just striking the squirrel with the tips of his wing. Mr. *chickaree* merely ducked his head and remained in the nest. The seeming unconcern of the squirrel increased the rage of the robin and again he poised for a dive. This time he did not change his course, but projected his full weight against the squirrel in a head-on collision. The effect was instantaneous, and a complete surprise for the squirrel. He was knocked completely out of the nest and fell several feet before his sharp claws could obtain sufficient hold to prevent a trip to terra firma.

Encouraged by this event, the robins continued the attack and chased their enemy through the tops of several trees, until he finally disappeared in one of his many hiding places.

NELSON.

GARDEN NOTES FROM LOUISIANA.

It was my privilege last season, to enjoy an intimate relation to my bird neighbors. They came fearlessly to pick up the food scattered for them; and the bird table in the rose garden was a popular resort and daily amusement for me. The robber Blue Jays took their repast with an air of insolence and greed, and not contented with all they could eat, they carried away food for future use, with a boisterous clatter that was exasperating. The saucy House Wrens were so cunning, their quick nervous movements and blithe notes—"cheery, cheery"—were always my pleasure.

The timid Bob-white had confidence to make its nest in a tangle of vines at the back of the garden, on the ground closely by the fence, and I hope nothing happened to its dozen eggs. They disappeared, whether as chicks or viciously, I could not tell. The aristocrat of the garden was a Mocking Bird that had his nest in the wild trumpet vine. He owned the place, and even disputed my right to walk in the garden. He would watch me, flying from the housetop to the tree, uttering his call of danger. When he was hungry, however, he did not hesitate to order me to prepare his food, and would then come boldly to the bird-table while I stood motionless three yards distant.

The Tufted Titmouse gave me a charming call in migration and spent the holidays in the garden, and ate freely from the table. A pair of Cardinals were the loveliest of all my feathered friends. They came for food timidly, and they were afraid of the Mocking Bird especially.

The female was sick and the tender solicitude of its mate was beautiful. The male bird took a crumb from the table and carried it to his mate, but the bird was too ill for food, and later I found her cold and lifeless on the ground. Tears of sadness filled my eyes, and resentment also, for I detected evidence that a cruel sling shot was the cause of the pathetic fate of the bird. My bright plumaged friend found another mate and they selected the vine over my window for their residence. When I discovered their intentions, I closed the window and shade and watched as secretly as possible. April 24th there was one gray, brown marked egg and every day one more until there were three in the nest. During incubation, the female bird would seem to get lonely and she would call—"Choe, choe, choe," until the male bird

appeared in the tree near by and then she seemed satisfied. One morning early she sought her mate to tell the good news. They returned to the nest together and tenderly talked to the dearest chick that ever was seen, and by night all three were hatched. To me they were naked ugly little things, but they were objects of devoted care by the parent birds. Worms were their food at first, and then an oat-field near by furnished food for the hungry fledglings. They grew rapidly and one morning the old birds coaxed the little ones out of the nest, into the big world, and they were gone. The brilliant plumage of the cardinals makes its end a tragedy. In Louisiana they are hunted and trapped for sale, as cage birds, until they are nearly exterminated. Their pathetic fate appeals to bird lovers, and unless something can be done for their protection the Cardinal Grosbeak will be gone from the wild bird life of this state.

MRS. L. G. BALDWIN, La.



YOUNG GREEN HERONS.

GOLDEN-FRONTED WOODPECKER.

A. O. U. No. 410.

(Melanerpes aurifrons)

RANGE.

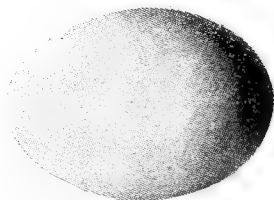
The United States range of this bird is practically restricted to the central and southern portions of Texas, from which it ranges southwards throughout the northern half of Mexico. They breed throughout their range.

DESCRIPTION.

Length, 10.; extent, 17 in.; tail, 3.5 in.; Adult male.—Upper parts with the exception of the head and rump, closely barred with black and white; rump, white; head and under parts a clear ashy gray; nape forehead and nasal tufts, golden yellow; patch of scarlet adorns the crown; belly tinged with yellowish. Female.—Marked as the male except the red crown patch is replaced with the gray of the rest of the head.

Young birds lack both the red crown patch and the yellow forehead and nape.

NEST AND EGGS.

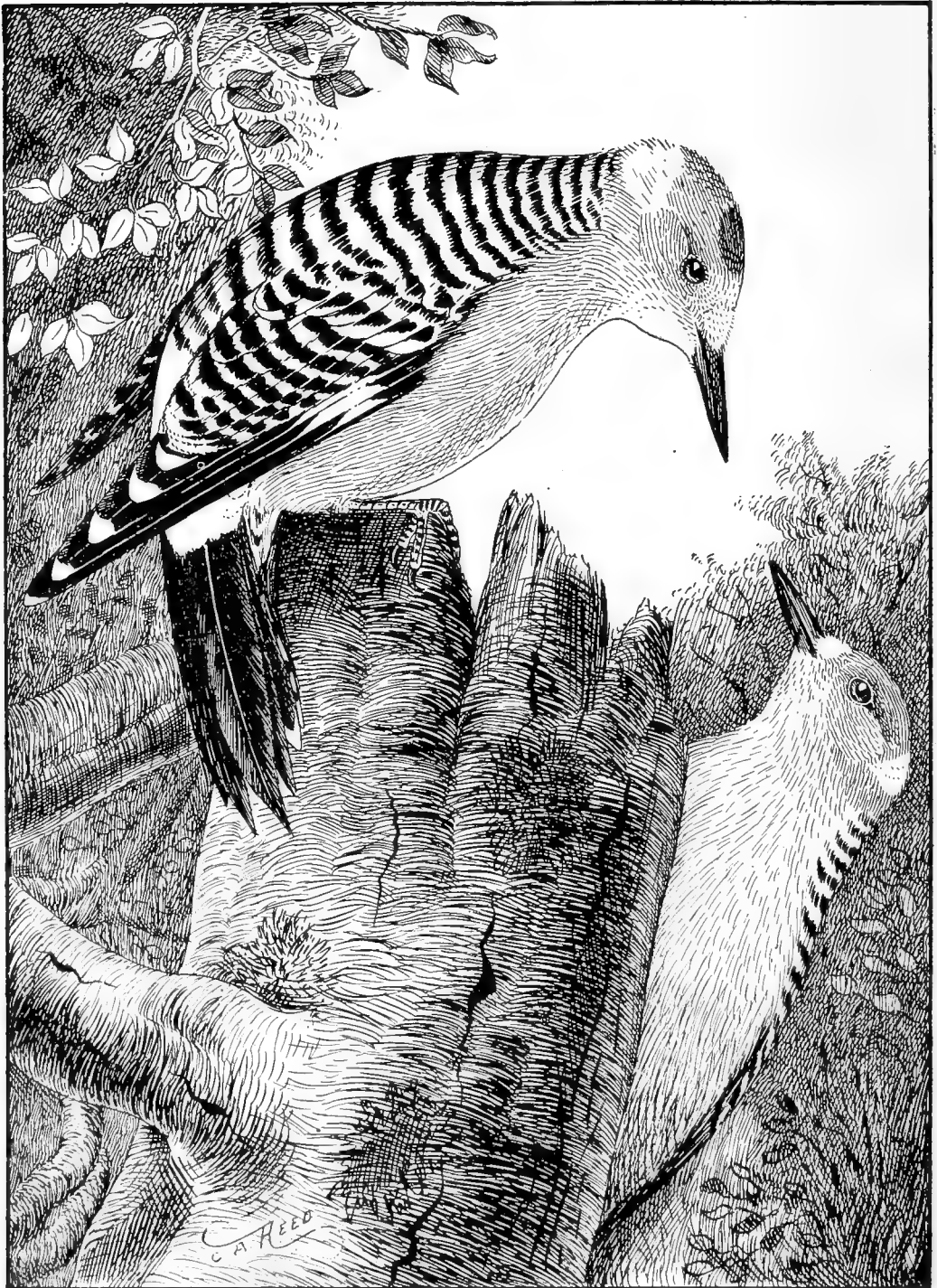


Golden-fronted Woodpeckers breed abundantly along the Lower Rio Grande in Texas, making their homes high up in the live timber. Although they seem to prefer a live tree for their nest many of them have adapted telegraph poles to their needs and hundreds of them are found in these locations in some localities. They breed during the latter part of April and through May. Their five or six eggs are a somewhat dull glossy white.

HABITS.

These beautiful Woodpeckers, while abundant in their locality, have a very restricted range and have yet to be met with in the United States outside of Texas. They are very diligent workers and are able to excavate a cavity for their nest in the heart of a live tree. Both birds assist in this work and they are very noisy, so noisy in fact that it is often the cause of the discovery of the nest and possibly the theft of the eggs.

Both birds also assist in the incubation of the eggs, which occupies a period of about two weeks. The young remain in the wood hewn home



GOLDEN-FRONTED WOODPECKER.

for from fifteen to twenty days and then spend a day or two clambering about the outside of the tree, testing their wings by little flights from one branch to another until they have sufficient confidence in their ability to successfully navigate the air, to launch forth into the world and gain their own livelihood.

Both parents are very devoted to their eggs and young and, while they generally leave the nest upon the approach of a human being, if it is molested they will return and defend it to the best of their ability. Their food consists chiefly of insects, with side dishes of fruit, berries, and grain. Taken as a whole they may be regarded as very useful birds and they should be well protected as such, as well for their beauty which would make them a welcome addition to any section of the country. About the only serious charge that is brought against them is their habit of boring into telegraph poles and converting these public necessities into dwelling places for their young. The birds have found these very advantageous places to serve as lookout stations and have found that as a rule they are less likely to be disturbed in these locations, so in some sections they are quite generally used and as many as a dozen holes have been found in a single pole, thereby nearly ruining its usefulness. It is said that on some lines nearly all the poles were destroyed thereby entailing quite a loss which was charged up against the woodpeckers, and was the cause of a warfare against them in that section.



Photo by J. B. Pardoe.

YOUNG BROAD-WINGED HAWKS.

GREAT DESTRUCTION OF BIRDLIFE BY THE ELEMENTS.

It is quite probable that this year will rank as the most destructive to the birdlife throughout the country, of any within the memory of anyone living today. Rain storms, cloudbursts, and swollen rivers, together with numerous forest and brush fires have killed countless thousands of both adults and young birds. Unfortunately these calamities have occurred during the height of the breeding season and therefore allowed no opportunity for the escape of either the young or adult. Throughout May numerous small brush fires were daily occurrences, while forest fires raged uncontrolled for weeks, and birds were forced to abandon their nests, eggs, and young and seek new locations.

Still more destructive were the floods and rains that came in June. Of course the birds which suffered directly from the excess of water, were those whose nests were on or near the ground, but I think by far the greatest mortality occurred among the warblers, flycatchers, vireos and other insect eating birds. Full as many of the young appear to have died of starvation as were drowned owing to the inability of the parents to get them a supply of food.

"The beautiful colony of about thirty Purple Martins occupying the bird house of William C. Horton, Brattleboro, Vt., met with serious disaster during the long cold rain. June twenty-third it was noticed that there were no martins flying about, and fearing that something was wrong an investigation showed that there were thirty dead little birds, some just coming from the shell,—others perhaps a week old. There were twelve unhatched eggs and two adult birds. The latter were on one nest and were covering four decaying babies. The nests were completely water-soaked and there is no doubt the little featherless babies died from lack of warmth and sunshine to dry the nests. There is no wonder the ever faithful martins fled from their homes during their breeding season, as the decomposing little ones and the water-soaked apartments furnished abundant reasons for the desertion. Nothing was seen of the colony after June 23 until July 2, when one pair returned, flew many times about their home but not daring to enter. Presently one of them alighted on the spire of the house and apparently said something to the other for they both flew away. It is not expected that the birds will return again this year and it is our hope that the impression of the horror will not be sufficient to deter them from returning in 1904. The bird house is known as the Castle and a photo-

graph and full account of it's occupants were given in the June 1902 Ornithology." Francis B. Horton.

Although for more than two weeks, a cold steady rain fell, I little expected to see the awful havoc which it had created when I took my first day's outing after the storm. Scores of Red-wing Blackbirds nests which had been a foot or two feet above the water when last I had seen them, were entirely submerged. The water had formed miniature lakes in many hollows where Song and Field Sparrows had taken up the abode. Yellow Warblers, Redstarts, Prairie and Chestnut-sided Warblers were unable to get food for their young and the results were apparent upon inspecting the nests. In some cases the skillfully woven nests of the Red-eyed Vireos had made water tight baskets and the dexterity of the parents had been the cause of death of their little ones.

Robins, Catbirds, Thrushes, Thrashers, Towhees, and Grosbeaks were also numbered among the unfortunates.

Out of twenty-one nests that I had located as being in particularly desirable positions to make photographs, but one escaped destruction. Twenty nests out of twenty-one destroyed;—seventy-five out of eighty young birds and eggs that the nests contained perished. The one nest which escaped out of the number was that of a House Wren, a lively little body who seemed capable of providing food for her five little ones in spite of all difficulties; of course on account of its location in an old stump this nest was fully protected from the storm and remained dry. As many other localities throughout the country suffered a great deal worse than this, it is probable that this percentage of mortality among the young birds is not in excess of what the average will be.

As these twenty-one nests were but a fraction of those that were in the locality and as this locality is but a infinitesimally small part of the territory which was invaded by storm and flood, it can readily be imagined that the sum total of young birds which perished will amount to hundreds of thousands.

Although some of the birds have made new homes and if they escape further disasters will raise their brood of little ones, the great majority of those who lost will make no further attempt this year, and it is more than probable that for several years to come the numbers of certain species will be noticeably diminished as a direct result of this year's disasters.

Identification Chart No. 19.

BLACKBIRDS.

498.

No. 498. Red-winged Blackbird (*Agelaius phoeniceus*).

Distributed throughout North America south of the Great Slave Lake. Plumage wholly black with exception of the shoulders which are reddish orange and white the colors blending together. Length about 8.5 in. Female—Above blackish brown streaked with lighter and tending to show median and superciliary stripes on the head; below whitish, streaked with dusky. Sides of head and throat are tinged with pinkish. This species of Blackbird was formerly subdivided into two subspecies, recently it has been still further subdivided by Mr. Ridgway. It is not necessary to note the distinction here. At best, they can only be determined by the use of micrometer calipers and then not with any degree of certainty.



499.

No. 499. Bicolored Blackbird (*Agelaius gubernator*).

Pacific coast district of the United States from Washington to Lower California. Wholly black with scarlet shoulders only slightly or not at all edged with buffy. Female like the preceding species.



500.

No. 500. Tricolored Blackbird (*Agelaius tricolor*).

Range along the Pacific coast about the same as the preceding species. Shoulders a deep blood red, margined widely and abruptly with white. Female very similar to the preceding species except that the coverts are quite strongly edged with white.

C. A. REED

PUFFINS.

No. 12. Tufted Puffin (*Lunda cirrhata*).

Coasts of North Pacific from the Santa Barbara Islands, California, northwards. Adults in summer: Above blackish; below sooty black. Face white and ear tufts straw color. Eye white surrounded with a red ring; bill reddish. In winter: Bill duller and darker and smaller owing to moulting the scaly shields; no eye ring, and the feet are more orange. Young birds do not have the ear tufts and the face is blackish. Length about 16in.

No. 13. Puffin (*Fratercula arctica*).

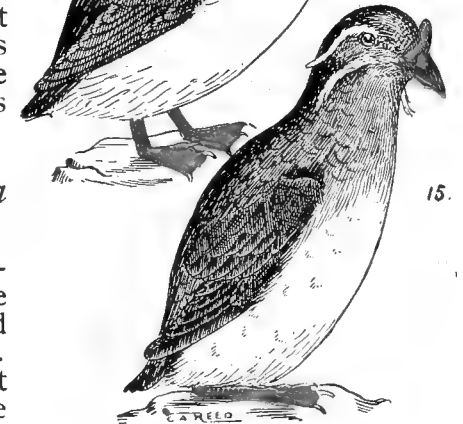
Breeds along the North Atlantic coast. South in winter to Long Island. Upper parts including a ring around the neck, black. Face, cheeks, chin and under parts, white. Eye white; feet and tip of bill reddish orange; base of bill greenish yellow. No ear tufts, but the upper eyelid has an upright horny appendage and the lower eyelid a lateral one. Young birds and adults in winter have smaller bills as in the preceding species and the face is blackish while the horns and eye ring are lacking. Length about 14in.

13a Large-billed Puffin (*Fratercula arctica glacialis*).

A somewhat larger bird than the preceding and the bill is slightly relatively larger. It is found in the Arctic Ocean.

No. 14. Horned Puffin (*Fratercula corniculata*).

Found on the coasts and islands of the North Pacific. Similar to the two preceding species except that the blackish brown band across the breast extends upwards meeting the base of the bill in a point. The young and winter adults differ in the same respects as do the others of this family.

No. 15 Rhinoceros Auklet (*Cerorhinca monocerata*).

Found along the whole Pacific coast of North America. Upper parts blackish, shading into gray on the breast, chin, throat, and sides. Thin lengthened tufts of feathers from above and below the eye. Bill orange colored and ornamented with an upright horn at the base. In winter the plumage is the same with the horn lacking.

MOULTING.

BY DR. MORRIS GIBBS.

All birds moult, and presumably twice a year, the moult with which we are familiar, the one in the late summer and early autumn, which is more pronounced, often gives a bird a new coat of a different hue. Then the bird changes back to the original spring coat in color; but this latter moult is so gradual that we are hardly aware of the transition. The Bobolink change to an ochraceous in the summer, and then leaves us for the south, but when he returns in the spring he has resumed his coat of black and white, so to speak. The Goldfinch, like the Bobolink changes to the less pronounced colors of the female, yet he stays with us all the year and resumes the sulphur yellow sometimes between October and April. Yet though I have taken the Goldfinch in the months of January, February and March I have been unable to find that this bird has a complete, that is, sudden change in the early spring like that of the fall. I mention these two species because they are to an extent alike in adopting the colors of the female, yet are entirely unlike in their winter habits.

The Bobolink is the first to moult in the Great Lake Region. The moult of this one-brooded species begins by the middle of July, and earlier, and in the last of the month flocks of ten to an hundred may be seen in the meadows and marshes, when all gradations of plumage may be seen, from the spotted black and white to the perfect fall coat. The complete moult takes considerable time, and throughout the operation the birds continue to flock and keep low, never rising much above the fence and weeds. The males and females are indistinguishable as they rise and whirl to a little distance. The once dashing songster no longer rises on fluttering wing to stimulate us with his ecstatic, rollicking song. Soon the augmenting flocks leave for the south; and down on the coast they are called reed birds, and later rice birds.

The Goldfinch nests last, habitually, and it also moults last, for it rarely drops its spring coat until well into October, and I have seen a male in the bright sulphur coat in the very last of the month. A friend of mine took a set of Goldfinch's eggs in September, and certainly this species does not moult until the duties of nesting are through with. The period of moulting depends on conditions affecting both sexes, and these conditions largely depend on the nesting.

In a large majority of cases the moult takes place within a month after the nesting duties are completed, but this is not a rule as will be shown. It follows that the Hawks and Owls as early nesters, are among the early ones to moult. This is so, and out of over one hundred

Hawks shot in early September only six gave the slightest evidence that the process had not been fully completed, while the Owls were all perfect. Yet at the same date, of 206 Blue Jays and over 40 Crows which were examined, three-fourths of the Jays gave evidence that moulting was still in progress, pin-feathers still covering the heads of many, and several Crows plainly showed evidence of feather shedding. These observations were made from specimens shot by parties who went out to kill so-called game destroyers, a foolish practice, followed with a zeal worthy of a better cause. Herons of two kinds, and also a large number of Kingfishers gave evidence that the process was completed. Hawks and Owls, which are credited as raisers of a single brood, moult early. Every collector has seen flocks of Semipalmated and Least Sandpipers and Semipalmated Plovers on the shores of our small interior lakes by August 10th. It is well known that these small waders breed well to our north and only appear with us after nesting and moulting. At least I have yet to meet with any of these migrants from the far north which gave any evidence of moulting at the time they were with us.

Some birds are very tough looking individuals during the moult and while the feathers are coming in. At this season they keep quiet, and as much as possible out of sight. There are no species in my neighborhood which shed their wing feathers all at once, and all are capable of flying throughout the period. But at the north where the wild geese spend the season, the birds are often so badly handicapped by the temporary loss of their quill feathers that the natives catch them in large numbers. The only portion of the plumage that is shed together so that it is noticeable is on the head and neck, that is in districts that I have visited. The shedding of the long feathers is gradual and hardly noticeable, but may be nicely observed in the quill feathers. It takes nearly a month for the completion of the process in the summer or early fall with birds the size of a hawk but there is no time when the birds are not fully able to move about in this section. Sometimes a robin or sparrow may be seen without a tail, but this is noticeable for only a few days, as the tail feathers grow in very rapidly. If a bird's quill feathers are cut off in the spring the bird will not be able to fly until the moult occurs in August, when the useless stubs are pushed out by the new feathers. Confinement and improper feeding, together with want of exercise will sometimes greatly retard the process of moulting, as I have repeatedly observed, and the same delay is often noticed in the exfoliation of captive serpents.

Captive snakes are sometimes all of a month in removing their old slough, whereas the wild individuals are often seen to escape from the

external mask in a minute or two, after the opening is well made for their exit. In the same way, pet parrots and other birds are sometimes all of six weeks in moulting, and I have seen some birds in confinement which had tag feathers hanging for months, and they have to be assisted at times to complete their change.

The Scarlet Tanager is a good subject to study in August, for the bright red male gradually assumes the plumage of the female; at least I have taken these red specimens with more or less blotches of the yellowish-green in their coats, giving a decidedly peculiar appearance to the birds. This peculiarity becomes more pronounced as the season advances until the birds are nearly all over of a greenish hue. I have never seen a male in the late summer that was entirely of the color of the female, and judge that as soon as they reach this stage the band moves to the south. Brilliant birds nearly always lose much of their striking colors in the autumnal moult; that is the brilliant coloration is generally subdued, but many of them are even more attractive in their modest coats.

There are some birds which are so secret in their moulting that the process has not yet been studied. I am in doubt as to the movements of the Baltimore Oriole in moulting, and am some in favor of admitting that these birds move to the south before performing this change. No birds leave us before moulting that I can learn of, yet I could never learn that the orioles moulted with us. If they do moult while still at the north then they are very secret in the act and must perform the change very rapidly, which is unlike their relatives the bobolinks and the grackles, which birds are easily observed. What is more, I have repeatedly seen brilliantly plumaged male orioles in Michigan as late as the twenty-eighth of August. As the orioles disappear very soon after this date, they must moult very quickly and then depart at once.

The Hummer moults immediately after the nesting duties have been performed, and it is very rare to see a bright Ruby-throat after July 15th, and I have yet to see a well plumaged male about the flowers in August, which is conclusive evidence that the Hummers moult early. The movements of these birds have been carefully watched for years as they sport among the flowers of our garden beds.

Many birds make so pronounced a change in moulting that identification is difficult for the novice, and not rarely the advanced student fails. For instance the Black-poll'd and Bay-breasted Warblers are markedly different in the spring, but in the late summer it is exceedingly difficult to distinguish species, especially the birds of the year and the females. In many species the female takes the appearance of the immatures, and sometimes this is the case with the male as well; the whole family moving to the south as a uniformed band.

In many species the sexes are indistinguishable from the plumage at all times. This is noticeable in small birds, and among the Snipes and many other shore birds. As a rule the females are not much given to change in plumage at any time, though all moult as with the bright plumaged species. In some birds the males take on remarkable changes during the breeding season and drop these adornments after the nesting season is over. The Ruff is a remarkable example of seasonal change, while some of the Sandpipers develop peculiarities in anatomical structure, or at least at this season give peculiar expression to ordinarily quiescent functions. Many, as the plume bearing herons, are adorned in the spring alone.

In nearly all species of birds where there is a difference in plumage in the sexes, the male is the smarter in dress. The only exception is among the Phalaropes, where the females are the more beautifully colored. And as a fitting accompaniment, these birds are among the most graceful creatures that swim, walk or fly.

BLACK-NECKED STILT.

A. O. U. No. 226.

(*Himantopus mexicanus*.)

RANGE.

Found through temperate North America from northern United States southwards. It is rare in the eastern portions of the United States and is rather inclined to be southerly in its range in the western portion.

DESCRIPTION.

Length, 14.5 in.; extent about 24 in.; tail, 2.5 in.; legs, 7.5 in. Upper parts glossy greenish black; below white. Legs, reddish; bill, black; rump and tail, white.



NEST AND EGGS.

For a situation for their nest, Stilts select a small natural hollow in the ground; this is slightly lined with dry grasses, upon which the three or four eggs are laid. The eggs have a greenish yellow ground,



BLACK-NECKED STILT.

and are heavily lined, spotted and blotched with blackish brown. Full complements may be found during the latter part of May. A favorite location for the nest is in the grass bordering some lake or stream.

HABITS.

In relation to the size of the bird, the Black-necked Stilts have longer legs than any others of our waders. The long, red, slender, stilt-like appendages seem scarcely able to support the weight of their owner, yet these waders are very graceful and strut and run about with the ease of their shorter legged companions. Their food is made up of insect, larvae, worms, small crustacea, etc. When securing their food they frequently may be seen standing in water up to their body and it is necessary for them to submerge their head, when they can reach the bottom with their long sensitive bills. Their wings are very long and swallow-like, reaching beyond the tail when folded. Their flight is very easy, swift, and graceful. Like a great many of the waders they have the habit of skimming first on one side, then on the other, thus alternately exposing their black back and white under parts; a flock of these birds on the wing therefore makes a very striking sight as the white and black flashes in kaleidescopic fashion. The long lanke red legs are carried straight behind them and extend far beyond the end of the tail. Although frequently single pairs nest in a locality they usually go in quite large flocks and in some sections of the country where they breed several nests may be in sight at the same time.

Having only rudimentary webs to their toes, they are poor swimmers, although frequently they will swim across a shallow inlet, making slow progress until their long legs touch the bottom of the other side, when they again assume their attitudes of grace.

Because of their striking appearance rather than any qualities that they have as table birds, they are killed whenever the opportunity occurs. In localities where they are frequently shot at, they become very shy, otherwise their numbers would be a great deal less than they now are. In open pond holes where they can see for some distance they will rarely allow a gunner to get within gunshot but in places where the tall grass grows up to the edge of the water they will often hide rather than fly and will not start up until nearly stepped upon, when they will take wing and double a turn to get out of the way meanwhile uttering a sharp, metallic whistle.



CORRESPONDENCE.

E. W. Graves, Iowa.—The bird you describe might be either the Alder or Traills Flycatcher, more likely the latter on account of the locality. The eggs of these two birds cannot be distinguished with certainty.

Minnie Camp, Tenn.—The first bird about which you inquire is the Carolina Wren. It is not unusual for these birds to build in the corner of a barn or shed and the nest is frequently arched over. (b). The Prothonotary Warbler is a golden color all over; very intense on the head and slightly greenish on the back. (c). The Tufted Titmouse is the last bird mentioned in your letter.

Earl Percy, Calif.—(1). Arkansas Kingbird. (2). Ash-throated Flycatcher.

Gerald B. Thomas, Iowa.—The hawk that you describe answers nearest to the description of the adult Red-shouldered Hawk. The under parts are a nearly uniform reddish brown, with black shafts to the feathers. The shoulder is quite noticeably brighter than the color of the rest of the upper parts.

Clair P. McMorran, Wash.—The bird you mention is undoubtedly a Mountain Bluebird as it could hardly be mistaken for any other.

Marjorie I. Crane.—The bird which you found under the lamp post was either a female or a young male of the Indigo Bunting.



Address communications for this department to
 MEG MERRYTHOUGHT, 156 Waterville Street,
 Waterbury, Ct.

DEAR YOUNG FOLKS:

Some of you have asked about an Audubon Society for children. Anyone under the age of eighteen years, by signing the pledge given below, may become an Associate Member of the Society and receive the Audubon button. By signing the pledge and sending a dime to the treasurer they may become Junior Members, and receive the Audubon button and also certificate of membership. This is the pledge: "I promise not to harm our birds or their eggs, and to protect our birds whenever I am able." I think the birds would carol special songs of thanksgiving if all the boys and girls would make this promise and keep it.

Two of our little friends write of some partial Albinos which they have seen. There are many strange freaks of color in the dress of birds, some of them due to the fact that most of our birds of bright plumage wear quiet gowns like the mother bird until the second or third summer, when they don the gay colors. Several years ago I saw a beautiful group of six Scarlet Tanagers, and watched them taking baths in a clear pool in the woods. The coat of one of the number was in process of changing, and a curious looking bird he was. His wing and tail feathers were an olive green like the female, and instead of the scarlet feathers, the rest of his plumage was a very peculiar red, a kind of composite strawberry, brick and Indian red. He did not seem to be conscious of any difference between himself and his fellows, but splashed the water about as merrily as the rest.

Thank you for the many kind words for the magazine and this corner.

Cordially Your Friend,

MEG MERRYTHOUGHT.

ANSWERS TO JULY PUZZLES.
A HIDDEN BIRD.

Ptarmigan.

WHAT BIRD IS THIS?

Cowbird.

ENIGMA NO. 1.

Ruby-crowned Knight.

ENIGMA NO. 2.

Downy Woodpecker.

ENIGMA NO. 3.

Scarlet Tanager.

SUGGESTED BIRDS.

- | | |
|----------------------|-----------------|
| 1. Cedar bird. | 6. Longspur. |
| 2. Chat. | 7. Knot. |
| 3. Least Flycatcher. | 8. Nightingale. |
| 4. Blue Jay. | 9. Reed. |
| 5. Killdeer. | 10. Robin. |

ROLL OF HONOR.

McCormick Jewett, Chicago, Ill.; Alice Garland, Andover, Mass.; Sally W. Orvis, Manchester, Vt.; Isidor Rehfuss, LaCrosse, Wis.; Gilbert Honax, Montclair, N. J.; Charles H. Abbott, Antrim, N. H.; Raymond Hill, Uxbridge, Mass.; Naomi E. Voris, Crawfordsville, Ind.; Everett P. Walton, New Vineyard, Me.; E. Louise Jordan, Defiance, Ohio; John A. Parks, Shaftsbury, Mich.; Marietta Washburn, Goodwin, S. D.; Stafford Francis, Exeter, N. H.

EXTRACTS FROM OUR MAIL BAG.

I have put up two bird boxes, and am having some Tree Swallows build in them. They are very tame. SAMUEL D. ROBBINS,
Belmont, Mass.

There is an English Sparrow around here that I see quite often. It has two or three of its big wing feathers white, and one or two in its tail. Don't you suppose it is a partial Albino? I saw a Song Sparrow the other day with one of his long wing feathers white. The English Sparrow shows more white when he flies. ALICE GARLAND,
Andover, Mass.

A Meadow Lark staid with us all winter. A nest of Wilson's Snipe was found near here about a year ago, with three eggs. I have seen a partially albino Robin this year. JOHN A. PARKS,
Shaftsbury, Mich.

Every year there comes a pair of Whip-poor-wills to a swamp about a quarter of a mile from my home. This year I made up my mind to find their nest, so a few nights ago with a companion, I went down to the swamp. It was about fifteen minutes past eight and already the Whip-poor-will's notes could be heard. On the edge of the swamp were low pines, and as we reached these the Whip-poor-will seemed about ten yards from us. As we walked toward him he circled above our heads and in a moment the female flew up from under our feet. We lit a match and looked about on the ground, and there by a stump on the pine straw lay a young whippoorwill beside an egg. The young looked as if just hatched and the next morning I went there and there sat two young ones and the mother within about a foot of the nest. I came away without molesting her.

ORREN W. TURNER,
Tarboro, N. C.

I have been watching the nest of a Partridge or Ruffed Grouse. I found it May eighth. It was on a rock up against a tree. There were ten eggs. I visited it June first. The young birds had just hatched and were leaving the nest. Some of them were quite a ways from the nest. I have seen thirty-two different species of birds this year.

CHARLES H. ABBOTT,
Antrim, N. H.

I have just come from my sister's room, where I have been watching four young robins. The nest is built in a corner where the house jogs out, and you can touch it without putting your hand out of the window. Just as I looked out at them from behind the curtain, so as not to scare the old bird, there was a swish, and the old bird flew up and began to feed them.

After she had gone I pushed back the curtain and looked at them. They were not at all afraid of me, but stared at me with their bright little eyes for all they were worth.

They are dark brown with light reddish brown spots on top, and yellow with dark brown spots underneath. Their heads are dark brown, with black streaks by the eyes.

They are about the size of a Phœbe now. Their bills are long and black, and their feet are yellow.

I went up to look at the Robins again, a minute ago, and when they saw me, two of them flew away. I went to another window to look at them again, and the other two flew and lit right under the window. I

went down and caught them, and twice I put them back, only to have them fly away.

Finally my mother and I got two to stay, and left them. When I looked out again, there were the male and female Robin, male and female Phœbe, (who nest on the other side of the house,) and the male and female Song Sparrow, (who nest on the lilac bush,) sitting on the telephone wires and *yelling*, no other word will express it, in concert.

SALLY W. ORVIS,
Manchester, Vt.

ENIGMA NO. 1.

My whole is an appropriate name for a common bird and contains thirteen letters. My 13-7-8-4-2 is a man one hears of frequently. My 5-7-12-1 was too heavy for one horse to pull. It is never wise to grow 3-12-4-9. Most people hope some time to go to 10-2-12-3-11-9. The 6-12-8-9 makes the birds lively.

JEAN LAMPTON,
Riverside-on-Hudson.

ENIGMA NO. 2.

My 1st is in cheat and also in chest,
My 2nd in hay, but not in vest,
My 3d is found in the short word set,
My 4th in tub but never in yet,
My 5th in the word ink is found,
My 6th in brown as well as in ground,
My 7th is in ducks and also in drakes,
Now who can tell what bird this makes?

SAMUEL D. ROBBINS,
Belmont, Mass.

ENIGMA NO. 3.

I am a handsome bird composed of sixteen letters.

My 13-15-6-16 is found in all large towns,

My 1-2-16-14 is what most children like,

My 3-5-6-9-12 are ornaments that people wear,

My 13-8-2-6-1 is a high mountain in Europe,

My 1-2-3-4-5-6-7-8-13-5-10-4 is another one of my names.

A group of these 13-5-10-4-12 in a cedar, 11-3 or pine tree in a snowy landscape makes a very beautiful sight.

RAYMOND HILL,
Uxbridge, Mass.

ENIGMA NO. 4.

My 1st is in small, but not in tall,
 My 2nd is in wall, but not in hall,
 My 3d is in bearer, but not in either,
 My 4th is in low, but not in now.
 My 5th is not in fast but it is in slow,
 My 6th is in "Poll" but not in cracker,
 My 7th is not in heathen but it is in weather,
 My whole is a bird which is common to all,
 And builds his nest with a hard mud wall.

GILBERT HONAX,
 Montclair, New Jersey.

 QUERIES.

1. What bird "keels" its tail when flying, folding the feathers from the middle?
2. What birds roost in family groups in the form of a circle on the ground, with heads presenting outward?
3. What is blacker than a crow?

 GLEANINGS.

THE BUSH SPARROW.

A bubble of music floats
 The slope of the hillside over,
 A little wandering sparrow's notes
 And the bloom of yarrow and clover.
 And the smell of sweet fern,
 And the bayberry leaf,
 On his ripple of song are stealing,
 For he is a chartered thief,
 The wealth of the fields revealing.

LUCY LARCOM.

Pheasants are the wariest of all game birds, running at the crackling of a dead twig, and flying upon the least stir. Negroes believe that they can also smell human beings. The females have sole care of the eggs and young broods.

MARTHA McCULLOUGH WILLIAMS,
 (In Next to the Ground.)

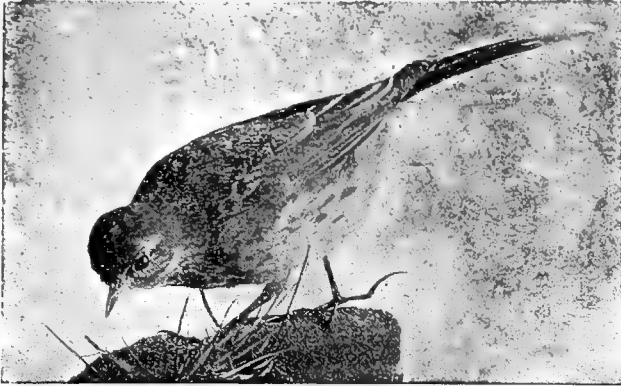
LETTER PUZZLE.

By Samuel D. Robbins, Belmont, Mass.

B	R	O	W	N	C	R	E	E	P	E	R	W	O	R	C
S	P	A	R	R	O	W	I	T	H	N	I	T	R	A	M
P	L	O	V	E	R	U	D	C	O	N	D	I	I	E	G
L	I	N	N	E	T	N	E	L	E	V	U	L	O	U	N
C	A	T	B	I	R	D	R	U	B	B	U	S	L	S	S
G	O	L	D	F	I	N	C	H	E	P	I	L	E	T	R
B	R	O	W	N	T	H	R	A	S	H	E	R	O	E	N
M	Y	R	T	L	E	W	A	R	B	L	E	R	D	U	E
K	I	N	G	F	I	S	H	E	R	R	K	S	T	E	K
K	I	N	G	B	I	R	D	A	E	D	T	H	D	N	F
S	I	S	K	I	N	Y	O	D	M	A	A	A	I	L	S
H	E	N	S	T	V	E	O	E	R	T	K	L	I	H	R
T	F	L	G	U	Z	K	K	T	C	C	O	C	R	O	S
Y	A	L	G	L	T	R	C	H	I	B	K	I	B	I	K
A	M	H	W	A	E	U	U	H	O	E	K	I	B	U	U
J	U	N	C	O	E	T	C	B	R	E	N	I	A	O	M

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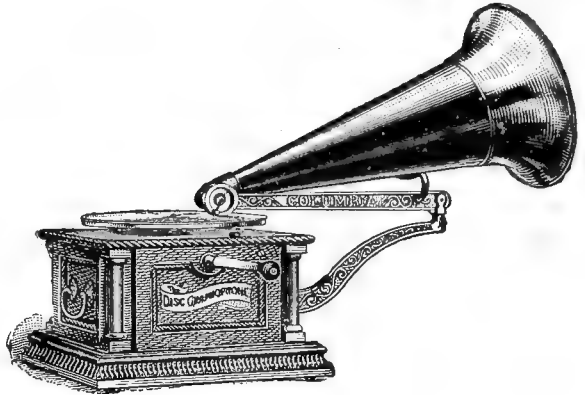
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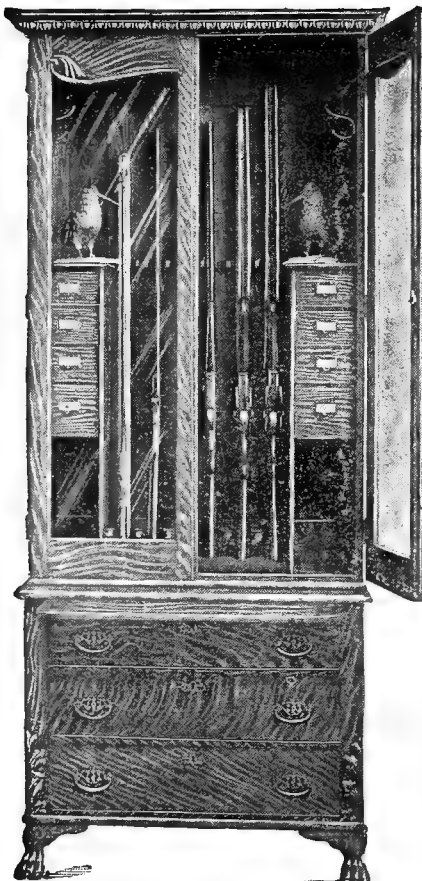
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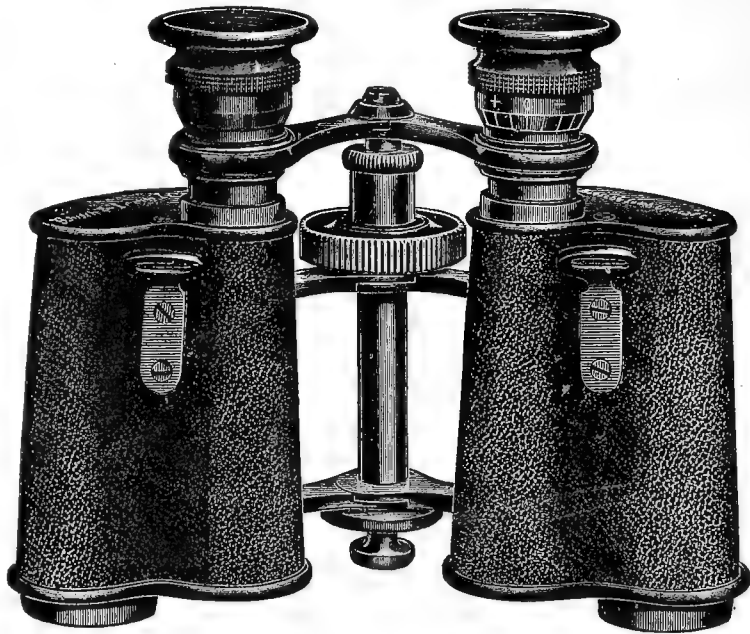
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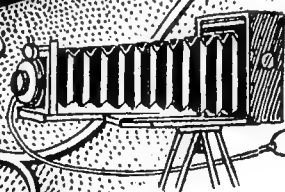
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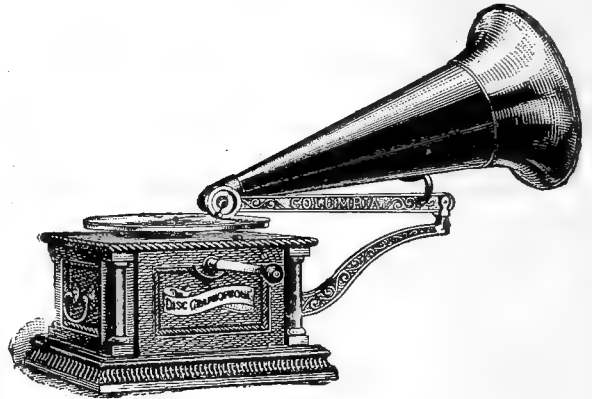
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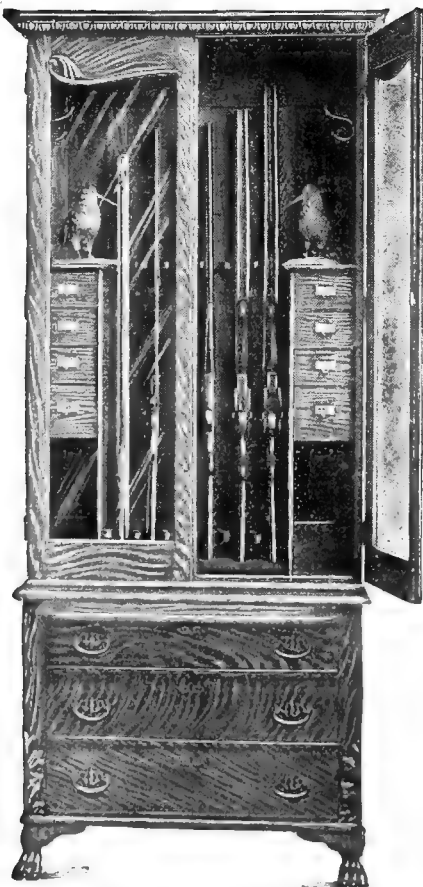
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\$ 50.00 PHOTO CONTEST

— FOR 1903 —

CLOSES THIS MONTH

We have decided to divide our photo contest this year into three classes; the reason for this is that it is obviously hardly fair to judge between the merits of a photograph of an adult wild bird, a young bird, and a photo of a nest and eggs. Therefore we have subdivided the contest into these three classes.

CLASS I. FREE ADULT WILD BIRDS. These may be on the nest, feeding the young, or in the brush or field. We shall NOT, however, consider CAPTIVE birds, or birds that have been wounded, whether they be tied out of doors or photographed free in the house or gallery. Awards as follows:

1st, \$10.00 cash; 2nd, \$5.00 pair of Field Glasses; 3rd, \$2.00 cash.

CLASS II. YOUNG BIRDS. These may be photographed in the nest or placed on suitable branches; in either case take great care not to do them any injury. Awards as follows:

1st, \$10.00 cash; 2nd, \$5.00 pair of Field Glasses; 3rd, \$2.00 cash

CLASS III. NEST AND EGGS. Nests must be in the natural situations actually chosen by the birds, although of course it is permissible and desirable to tie back all branches and leaves that will mar the picture.

1st, \$5.00 cash; 2nd, \$5.00 pair of Field Glasses; 3d, \$2.00 cash.

All photographs which we retain for publication, whether prize winners or not, will be paid for at the uniform rate of **50 cents each**, irrespective of the class.

All photos which we shall be unable to use will be returned to the owners.

Photos may be of any size, but 4x5 or larger are preferred. They may be made on any paper except blue print. Any one may send as many photos as they wish, and it is desirable to send in a letter separate from the photos, any interesting notes concerning their taking.

CONTEST CLOSES OCT 1.

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VOL. III

SEPTEMBER, 1903.

NO. 9

PHOTOGRAPHERS.

Remember that on the 1st of October our bird photo contest ends. Be sure and get your pictures here before then. We have received a large number now and have assurance of many more. See if you can not send the best one. Terms and premiums may be found on an advertising page in this number.

Prints can be on any paper except blueprint and may be either mounted or not.

Reports still continue to come in regarding the great destruction of birds during the recent storms. It will be several years before the loss of life sustained in these few weeks will be overcome.

Commencing with September the Fall migration begins. This is only secondary to the Spring migration as the most interesting period of the year to watch birds. It affords an opportunity for a vast amount of skill in identifying the young birds and the adults in their different plumages.

WHAT THE BIRDS SAY.

When light of morning is softly appearing,

What are the voices we often are hearing
As we lie half dreaming and half awake

Listening to sounds the sweet birds make?

The Whip-poor-will first breaks the still quiet hour,

“Whip-poor-will! Whip-poor-will!” His voice has great power,
Repeating it over and over again,

Now quickly, now slowly; a mournful refrain.



CATBIRD AND NEST.

The Goldfinch breaks in with a “sweet, sw-e-e-t”

Then with beautiful notes makes his sweet song complete.

The Chippy now comes with his "che-che-che-che!"

Not many birds are as early as he.

"Phoebe, phoebe!" Hear the imperative call

"Come, you don't see me is heard above all.

Now the Song Sparrow is singing alone,

Sweetly and clearly in musical tone.

Soon hear "Chebeck!" 'Tis the Flycatcher small,

Crying "chebeck" in a querulous call.

"Whitchery! Whitchery! Witchery!" Witch!"

Comes from the Yellow-throat down by the ditch.

"Very early! Very early! Wake up! Dilatory!"

Says Robin Redbreast in all his glory.

Joining with him is the Oriole heard,

Questions he is asking of each little bird.

Melodious, the solo which now arises,

Tuneful with many and sudden surprises,

'Tis the Bobolink, that merry fellow

With his black vest and coat trimmed with yellow.

He flings his rich notes into the air,

And warbles away with never a care.

'Tis five o'clock! The sun rises! Hush!

List to the wonderful song of the Thrush.

High, clear, flutelike, smooth, descending,

Pure, sweet and true to the very ending.

Over and over, with varying trills,

All through your soul and being thrills.

At last 'tis silent! When there pours forth again

Such a wonderful chorus as e'er heard by men,

Each one singing his own refrain,

Then all together and over again.

Thus joyfully through the long summer morn

In the air, the grand chorus of bird song is born.



CATBIRD.

CATBIRD.

A. O. U. No. 704

(Galeoscoptes carolinensis.)

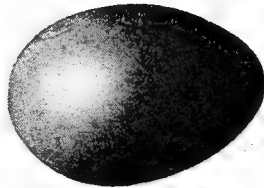
RANGE.

Eastern United States and southern Canada (in the interior); west to the Rocky Mountains. Winters from the Southern States to Panama.

DESCRIPTION.

Length, about 8 in.; extent, about 11 in.; tail, 3.5 in. Adults and young: crown, black; under tail coverts, chestnut; rest of plumage, gray, lighter beneath, darker above and shading into nearly black on the tail;

NEST AND EGGS.



Catbirds nest in thickets, vines, bushes or low trees. It is rarely placed more than ten feet from the ground, and is much oftener found at less than six feet. The nests vary considerable in composition, but are commonly made of twigs, grass, leaves and rootlets or grapevine; it is nearly always lined with fine black roots.

HABITS.

The Catbird or "Mockingbird of the North" is a common dweller in



Photo by J. B. Pardoe.

CATBIRD'S NEST.

open country either in the immediate vicinity of mankind or in localities which are seldom visited by human beings. They are one of the few birds which are seldom nicknamed, and which have few local names. The reason for this is that everyone, even if unacquainted with the species, will after hearing their song, ever after call them Catbirds. They have a certain call which they sometimes utter when angry or again may utter it right in the midst of their song; it does not take a very imaginative brain to liken this call to the mewing of a cat; hence, the name will always be associated with them.



ON HER NEST.

Although their dress is sombre and, gray they seem to be very proud and always wish to invite attention to themselves. Their manners are very impetuous and excitable; one instant they will be amiable, quietly hopping about the underbrush looking for their insect fare, the next they will be as angry as its possible for a bird to be, scolding and darting at you as though they would annihilate you, were it possible. Combined with their excitable nature, they have the most highly developed bump of curiosity of any birds that I know. Of course all birds are



FOUR CATBIRD'S EGGS AND OWNER.

curious to a certain extent, but Catbirds seem determined to find out what you are doing, and why you are doing it, and also what you are going to do next. They serve as the watchmen of the bird world and their note of alarm is one of the first to greet you when you visit a favorable locality. They are very pugnacious and fierce in the defense of their homes, and they appear also to have taken unto themselves the guardianship of the neighborhood for they are equally determined in the defense of the nests of other species.

If you secret yourself in some thicket and while remaining quiet make some slight unusual noise, the chances are that a Catbird will be the first to put in an appearance to investigate. His contortions, both of actions and speech, are worth the trial to witness. Now standing on tiptoe, with his neck stretched to the uttermost, now squatted down, with his head down lower than his feet, he will regard you from all points of vantage. Should he chance to be in a pleasant frame of mind, he will greet you with a soft clucking "put, put," followed by a purring "meouw." If you move or even remain quiet for a long time,



Photo by R. H. Beebe.

YOUNG CATBIRD.

his anger will be aroused and a series of cat-calls, stutterings and screeches will be hurled at you as rapidly as he can utter them.

Their song is a remarkably sweet and varied one. It is an interpretation of the songs of all the feathered inhabitants of the neighborhood interspersed with various notes peculiar to the Catbird. At frequent intervals they will pause and utter their plaintive "meouw" and various cluckings and peepings suggestive of a hen with chickens. In fact this last mimicry is so natural that on several occasions when I did not know of the Catbird's presence, I have been fooled into looking for the venturesome fowl which has strayed so far from home.

While singing, their favorite perch is the extreme tip of some bush or the end of a branch on a tree, from which for minutes at a time pours forth a melody that for variety is not equalled in the bird world, in fact if it were not for their feline calls, they would have received the name of Mockingbird in preference to their more southerly relative who now bears the name.

Their food consists entirely of insects from the opening of the season until fruits begin to ripen when they like to feed on cherries, strawberries, etc., to the disgust of the farmers who think only of the present evil, without regard to the former good that the birds have wrought them.



CATBIRD.

What voice is this we hear so sweet,
Broken, 'tis generally not half complete
When a coarse, sudden "meou" banishes doubt,
For the Catbird sings sweetly, but never without
Mixing in suddenly here and there,
The cry of the cat in every air.

ELIZABETH S. HILL



CATBIRD ON NEST.

THE CATBIRD'S SONG.

The Catbird sings a crooked song,
In minors that are flat,
And, when he can't control his voice
He mews just like a cat,
Then nods his head and whisks his tail
And lets it go at that.

OLIVER DAVIE.

IS IT A WATER-THRUSH?

One of the most interesting features in the study of bird life in a foreign land is the comparison of species with like species in the home-land. I have been much interested in following up the comparison of specie in this section of China with birds common to my home field of study in Tennessee, though I have found quite a number of birds which appear to be strangers to anything with which I am acquainted.



NESTING SITE.
A Glimpse Of China.

One of the most interesting specie with which I have met is what I should term a Water Thrush. The home of this bird is in the wild ravines of the mountain passes. The bird is somewhat the shape of the American Robin, but quite a little larger. The male is of a uniform deep black with feathers tipped with blue giving the bird a decided blue tint. The female is about the same color with markings less distinct.

I visited a wild ravine only a few minutes walk from my home where a clear little stream rushes down from the distant top of the mighty

mountain. This visit was paid in early April, and at that time I found a pair of these Thrushes (?) had chosen the ravine as a summer home. After a few minutes search among the rocks I found the great bulky nest of green moss and mud upon the bare face of an overhanging rock. The nest was wet with the spray from the ever roaring stream only a few feet below. This nest has all the appearance of an abnormally large Phoebe's nest except that the inner lining is of dried leaves and a few rootlets. The set of partly incubated eggs taken from this nest number four, and are of a white clay color with a purplish tint shading into a wreath around the larger end. The eggs are rather larger than those of a Brown Thrasher.



NEST IN SITUATION.

The habits of this bird are peculiar to itself. I have never seen the bird except in close proximity to some of the wilds of nature. The most common retreat is in some mountain gorge where a clear stream

lashes itself into a spray over the cataracts and falls. Here the bird may be seen flying from rock to rock just above the spray of the current, and alighting upon some little pinnacle, expanding its broad black tail as if delighting in its rich and glossy hues. These birds are quite solitary even during the breeding season. I have never seen them show the least fellowship with other birds, or even with those of their own kind. The note of the bird Che-e-e, uttered in a clear whistling tone. Other than this I have never heard a sound from the bird.

In the accompanying pictures you will see the nest and home of the pair from which I secured a set of eggs. Upon first consideration you may lead to pronounce the bird an Ouzel, but I think there is hardly any resemblance between the two birds. This bird does not, so far as I have been able to detect, ever enter the water except, possibly, to run along on the shoals in search of insects and larva.

I would be glad to have your ideas upon the subject, and any one addressing me at Foochow, China, will certainly receive an immediate reply to any matters of inquiry.

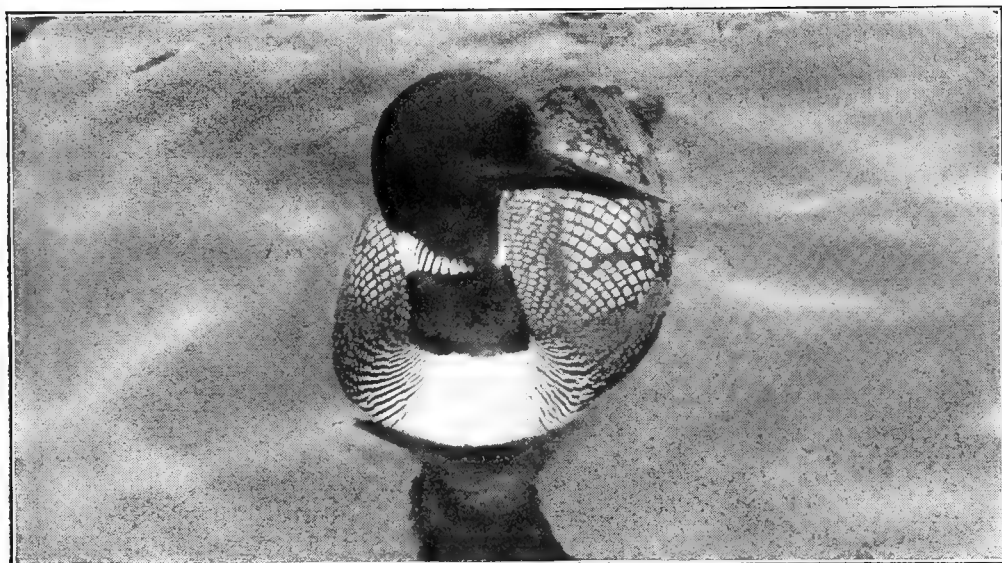
HARRY R. CALDWELL.

MRS. CHICKADEE'S TRIALS.

I have devoted much time to the study of birds this spring. A friend has accompanied me and we have enjoyed many delightful walks and seen many interesting sights. One day in the latter part of May, when we were walking along a woodsy road, we noticed the stump of a white birch which was about five feet above the ground and three inches in diameter. In the end was a little excavation which we thought must be a chickadee's nest; but there were no birds to be seen anywhere around so we came to the conclusion that it had been abandoned. Several days later, while walking through the same road with a little boy, we called his attention to the cavity (supposing that the birds had left it) and as the little fellow leaned over to look he took hold of the stump which broke off in his hands. The look of astonishment on his face told that he had seen something unexpected. There sat little Mrs. Chickadee who looked at him a moment and then flew out and alighted upon a tree near by. The little nest looked like a bit of felt lining the cavity, and in it were six little eggs. We placed the end of the stump in the soft ground while the dear little bird looked on saying "chick-a-dee-dee, chick-a-dee-dee." Then we left her and she went back to her eggs. Shortly after this we had a very severe storm. The wind blew a gale, trees lost their branches, many bird nests were blown away, and several baby birds found on the ground. We felt very anxious about Mrs. Chickadee, and as soon as possible went to see how she was

getting along. The stump had been blown over, but the eggs were safe. We pressed it down into the mud so that it was once more upright. Now we watched with renewed interest. Our patience was rewarded before long by finding that the little birds were hatched. Every day we went to visit our little family, and saw father and mother feeding the babies. They grew rapidly and we saw the little black heads thrust up reaching for the food, we thought they would soon be able to fly. One Sunday when we went to pay our daily visit, the old birds seemed to be unusually agitated; one of them flew in front of the nest and fluttered there without going in. We could not see the babies as plainly as usual, the nest did not seem so full. We wondered if the older birds could be teaching them to fly. We walked on and all the time that we were observing other things we heard the very loud call of the chickadees. On our way back we stopped opposite the nest, when, to our surprise and horror we saw coming out from the opening a little red squirrel who ran away as fast as possible upon seeing us. We thought our baby chickadee had come to an untimely end. The poor little mother was fluttering about calling "chick-a-dee-dee" in such a distressed tone, and a catbird, vireo, redstart and other chickadees had come to help her sound the alarm. We felt so sorry for her, after all her trials and tribulations to lose her babies in this way, but much to our delight we found next day that three of the babies were safe, and now they have flown away and we can no longer make our daily calls, as the little house is empty.

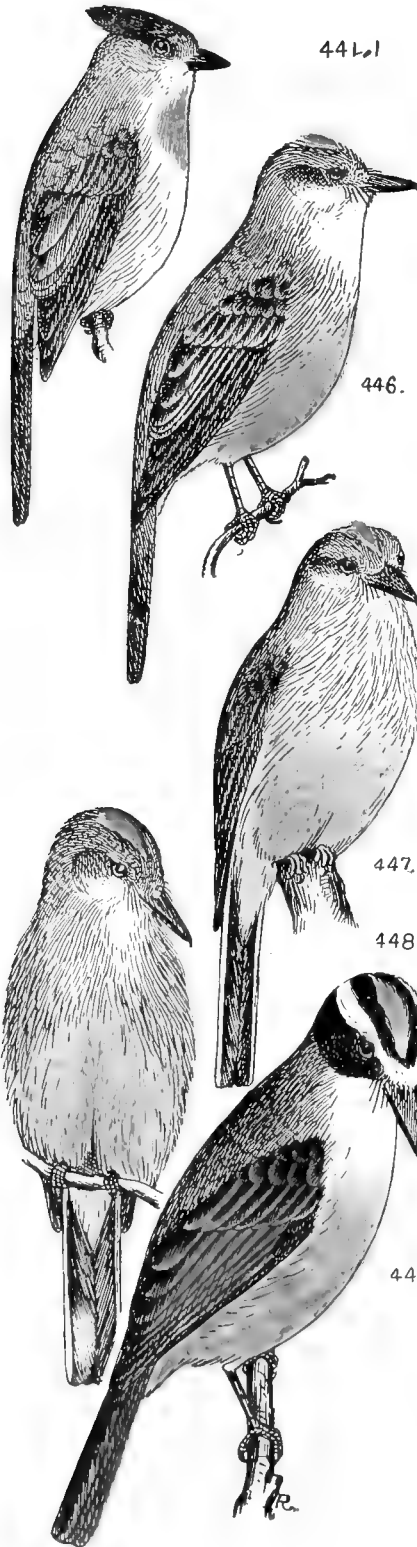
MARGARETTE H. PRICE.



LOON.

Identification Chart No. 20.

FLYCATCHERS.



441.1

No. 441.1: Rose-throated Becard, (*Platysaris alaiiae*).

Eastern Mexico; casually north to the Rio Grande valley in Texas. Length, 8 in. Upper parts dark gray shading to blackish on the wings and tail. Forehead and under parts whitish, washed with gray on the flanks. Crest black. Bill stouter than the typical flycatchers.

446.

No. 446. Couch Kingbird, (*Tyrannus melancholicus couchii*).

The whole of Mexico north to the southern boundary of the United States. Length about 9 in. Upper parts grayish shading to blackish on the wings, tail and ear coverts. Chin and throat white; breast gray; rest of under parts bright yellowish. A partly concealed orange and yellow patch on the crown.

447.

No. 447. Arkansas Kingbird, (*Tyrannus verticalis*).

Western United States from the Mississippi to the Pacific. South through Mexico. Length the same as above. The coloration is very similar. The gray of the breast extends up on the throat leaving only the chin white. The yellow underparts are much paler.

448

No. 448. Cassin Kingbird, (*Tyrannus vociferans*).

Through Mexico and north through western United States to Wyoming. Size same as the foregoing. Coloration similar to the last, with the exception that the gray on the breast and throat is decidedly darker and the yellow still paler.

449

No. 449. Flycatcher, (*Pitangus derbianus*).

Throughout Central America and Mexico, north to the southern boundary of the United States in Texas. Length, 10.5 in. Upper parts olive brownish; wings and tail decidedly chestnut color. Forehead, edges of crown, chin, throat, and upper breast white, shading gradually into the yellow of the under parts. Crown black, enclosing a yellow area. Sides of head black.

WOODPECKERS.

No. 406. Red-headed Woodpecker (*Melanerpes erythrocephalus*).

Central portions of the United States and southern Canada; rare east of the Hudson River and west of the Rocky Mts. Length 9 in. Back, wings, and tail glossy blue-black; secondaries, upper tail coverts and under parts below the breast, white. Whole head, neck, chin, throat and upper breast crimson, sometimes bordered with black where it meets the white of the under parts. Outer tail feathers often tipped with white. Young. Red of the adults replaced with gray, streaked with blackish. Under parts dusky white or grayish. Feathers of the back edged with gray.

No. 407. Ant-eating Woodpecker, (*Melanerpes formicivorus*).

From Mexico north through western Texas, New Mexico and Arizona. Length 9 in. Area about eye, around bill, back, wings, tail and breast, black; face, base of primaries, upper tail coverts and underparts, white.

407a. California Woodpecker, (*M. f. bairdi*).

Pacific coast from Oregon southwards.

407b. Narrow-fronted Woodpecker, (*M. f. augustifrons*).

Lower California.

No. 409. Red-bellied Woodpecker, (*Melanerpes carolinus*).

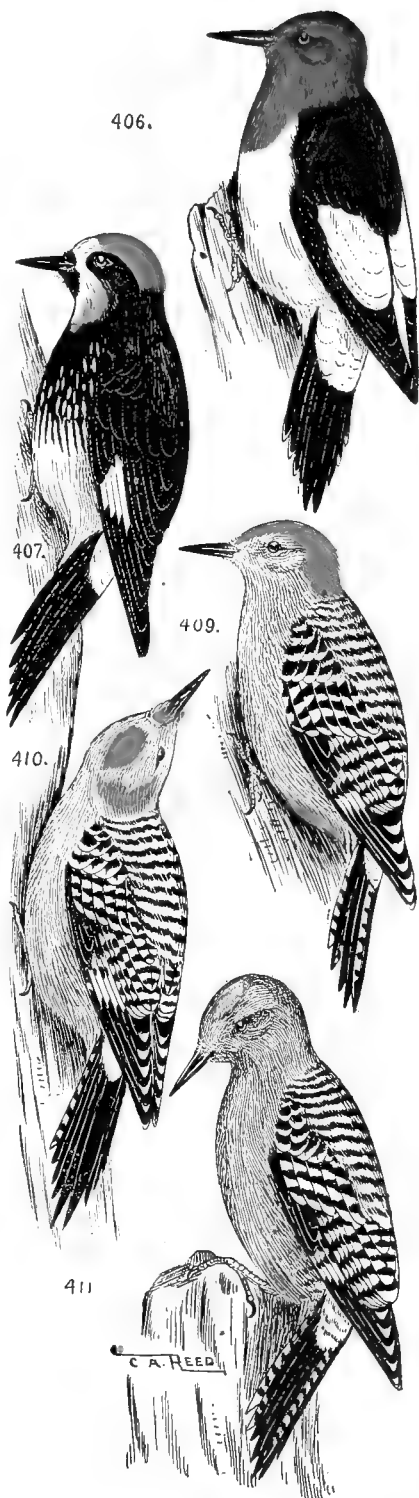
The United States east of the Rockies and south of New England. Length, 9.5 in. Whole crown and nape red. Back and tail black barred with white. Rump white and underparts grayish white. The female has the nape only red, the crown being grayish brown.

No. 410. Golden-fronted Woodpecker, (*Melanerpes aurifrons*).

Northern Mexico and southern Texas. Similar to the last except that the nasal tufts are yellow, the nape orange, and a small patch in center of the crown red. The female lacks the patch in the center of the crown.

No. 411. Gila Woodpecker, (*Melanerpes uropygialis*).

Southern Arizona and Calif. The same as the last without the yellow nape and nasal tufts, the center of the crown only, having a crimson patch. Female without color on the crown.



BROWNIE.

The Story of a Feathered Pet.

BY LEANDER S. KEYSER.

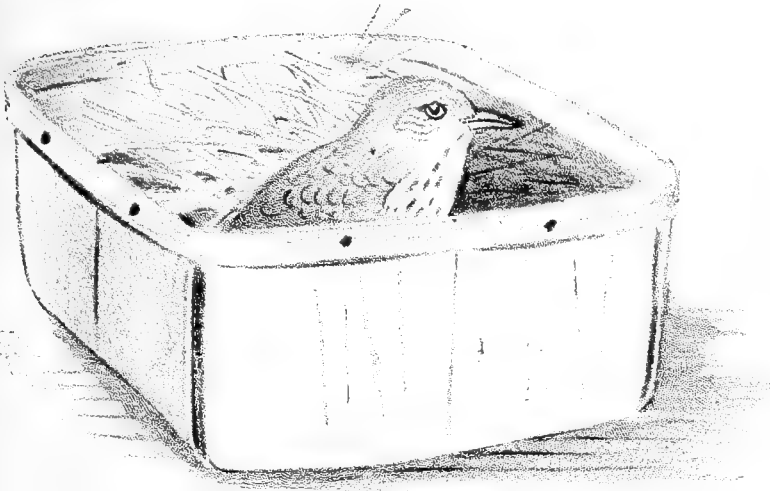


IT was natural to call him Brownie; first, because he was of a tawny color; second, because the name of his species is Brown Thrasher; not in any wise because he was as trig and handsome as we suppose the brownies of the story books to be. A young thrasher is not an Apollo—far from it. At first he felt distrustful, nestling shyly down in his little berry box, which was lined with soft grass, and blinking at his queer captors, who looked so different from the papa and mamma thrashers which had hitherto been his purveyors.

If I remember correctly, he would eat nothing the first evening. He even refused food the next morning, although he must have been very hungry after his long fast. To induce him to eat I had recourse to a little finesse, for you know, all is fair in love, war and natural history. I drew a cover over him, the woolen rag under which he had slept, then left him for a while. Presently I quietly approached him, holding a pellet of food between thumb and finger, and carefully pulled back the cloth so as to expose his beak, but without uncovering his eyes. At the same time I made a slight, scratching noise, somewhat in imitation of the sound made by the approach of the parent birds. The ruse was successful. Open flew the capacious mouth, and down went the food into the cavernous throat. Another morsel was ready for him in a moment, and was presented to him, with the cover drawn back from his gleaming eyes. He hesitated for a fraction of a second, then gulped down the proffered goodie.

That was the beginning of our friendship—Brownie's and mine. Do you want to reach a young bird's heart? Then travel *via* of his maw. My little pensioner's alert brain discovered at once that I would minister to his gastronomical needs, though of course he did not put it in quite that way, and thenceforth there was no trouble in feeding him, except to keep his voracious demands supplied. He wanted his meals quite often, and wanted a good deal at a time, and yet he has no gourmand; for when he had enough, and he knew well *when* he had enough, it was no use to offer him more. The utter nonchalance he showed when food was presented to him after his maw was filled, was really comical. He couldn't say "No!" in words, but he could flick his bill

to one side, and blink his wise little eyes, saying as plainly as could be, "No more at present, thanks!"



Although Brownie had never been outside of his nest, in a day or two he conceived a violent prejudice against remaining in the soft crib which had been improvised for him. He wanted to get out on a perch. So he lifted himself on his unsteady legs, flapped his wings

a few times, fluttered over the rim of the box, and went hopping awkwardly about on the floor of the cage, sometimes jamming up against the wires. Presently he espied a low perch. He took aim for it, projected himself toward it by the use of his springy legs, and struck it with his mottled breast. A scramble followed, bringing his wings into use, and at length he succeeded in grasping the rod with his claws, drew himself upon it, and sat there as contentedly as if all his life had been spent in such a position.

It is interesting to study birds at close range in this way, to make special note of the strength of their natural instincts. Each bird, even if taken from the nest at a very tender age, will follow most of the peculiar habits of its kind, learning things gradually but surely. Who taught Brownie how to use a perch, or that a perch was meant to be used at all? Heredity must have been his only tutor, something in his very organism that demanded that kind of a resting place.

Erelong he learned to hop from one perch to another, for his first cage was a small one; but his early attempts were tentative, and not always successful, and he had more than one awkward scramble and fall. Sometimes he would strike the floor with enough force, apparently, to knock the breath out of his body, but, after looking around a few moments in innocent surprise, he would try again. His instincts impelled him to perch and flit about, but he had to gain expertness by practice.

In a few days he was transferred to a large cage, which was set out on the rear porch. Placed on the sanded floor, he hopped a while, as if enjoying his larger freedom. Then he began to look up for a perch. Presently he espied one that was quite low, and sprang upon it. But his eye straightway espied another a little higher, and he leaped up to that.

However, he was not yet satisfied, for he saw still higher perches, and so he bent his legs and went through the motions of springing, but the distance was so great that he feared to make the adventure. Seeing he was dissatisfied, I lifted him to the highest perch in the cage, about four feet from the floor, where he sat and preened his feathers in perfect contentment. Young perching birds will usually seek the highest perch in the cage.

It was wonderful how rapidly my tawny pet grew. His progress could be noted almost from day to day. In a very few days more he was able to fly all about his large cage, and flit up and down the staircase of rods at will. In acquiring the fine art of eating after the manner of the adult bird, he seemed to make the slowest advancement. I suppose it was fully five or six weeks before he wholly ceased to take his food by opening his mouth for it and receiving it from the hand. Still, by degrees he learned to pick up his food, and the more he picked up of his own accord, the less feeding by hand was required, until by and by he refused entirely to take his meals in the juvenile way.

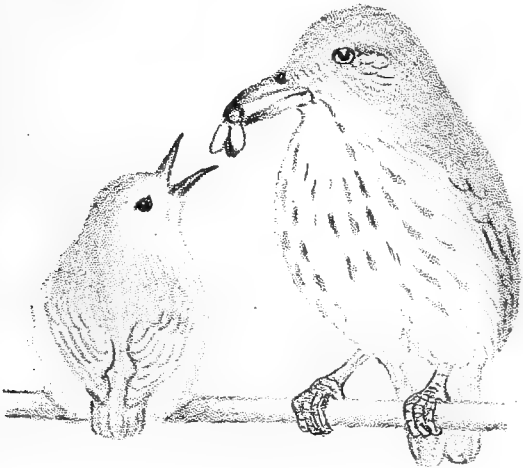
His chief difficulty seemed to be to work the tidbits back into his throat, so as to be able to swallow them. Again and again he would pick up a morsel, and try to swallow it, but would inadvertently flip it away to another part of the cage, or perhaps out upon the porch floor. It always requires a labored effort for young cage birds to learn to eat by picking, but the art is always mastered sooner or later. Brownie first learned to swallow flies, which I caught for him and of which he was very fond.

Every bird student is aware that the thrashers in the wild state are often seen digging on the ground in the woods, usually beneath the bushes, scattering the leaves and soil with their beaks. My pet soon exhibited this thrasher proclivity by digging in the earth and sand on the floor of his cage. How he loved to scatter it all about, and also to pull up the paper on which it was spread and tear it to shreds! When ever he could get hold of a corner or an edge of the paper, he would pull it up to see what might be concealed underneath.

I have said that the first thing he learned to eat according to the adult fashion was a fly. That is true as far as real food is concerned; but in reality the first objects he picked up and swallowed of his own accord were tiny clods and pebbles. All my young birds seemed to be aware that something hard and gritty was necessary for digestion, for long before they made any attempt to pick up their soft food, they would greedily pick up bits of earth and gravel and swallow them with apparent relish. It was surprising to note the size of some of the pieces they swallowed. Sometimes, after refusing other kinds of food,

they would fly to the bottom of the cage and take in a relay of gravel.

Long before Brownie had learned to help himself to his food he displayed a benevolent spirit that caused me no little surprise. A pair of young Orchard Orioles, just taken from the nest, were put into the cage with him. They were sweet little birds, of almost a golden yellow, and deserve a monograph all to themselves. A little comedy was enacted when Brownie and the Orioles were introduced. Coming face to face with one of them, Brownie looked narrowly at his chirping neighbor a moment, then squatted upon his haunches and opened his mouth as widely as he could, expecting the little thing to feed him. Of course the Oriole also opened *his* mouth, and there the two feathered babies sat, gaping at each other, the one looking like a giant compared with the other. This little farce was played again and again, to the infinite delight of the human spectators.



The Orioles were almost incessantly chirping for food, as is the habit of young birds of this species in the wild state. After a few days, Brownie must have made up his mind that his little comrades were suffering from hunger, and for this reason he exhibited the benevolent or paternal disposition to which I have referred. One day I gave him a fly. Instead of swallowing it, he chirped and twittered in a sweet, coaxing way, and leaped up to the perch

beside one of the orioles, which turned to him with open mandibles. Then what did Brownie do but try to put the fly into the Oriole's mouth? He did not succeed that time, for he had not yet learned to manipulate the fly with sufficient skill, but it was evident that his intentions were sincere. Instead of getting the fly into his little charge's throat, he could not loosen it from his own bill, and so, the first thing he and I knew, he had swallowed it himself. However, he soon learned by practice and experiment to hold a fly in the end of his bill, and thrust it down into the Oriole's throat. Sometimes, oddly enough, after he had pushed the fly down into the throat of one of his little friends, he would try to recover it, as if he regretted his generosity and wished he had eaten it himself.

But Brownie was not all suavity. A young Blue Jay was added to my little aviary. After he had learned to eat from my hand and had mastered the art of perching, he was put into the large cage with the other birds. This was too much for Brownie's equanimity. He re-

sented the stranger's intrusion. He dashed at the Jay, and struck him savagely with his long, lancelike beak, and drove the squawking youngster all over the cage floor. Several attempts were made to induce the thrasher to receive the new guest with hospitality, but he simply would not submit to the Jay's company, and that was the end of all argument; and so Brownie was given another large cage all to himself, for I feared he was beginning to abuse the Orioles, and here he was very happy for a while.

He was beginning to twitter an elaborate little song with his mandibles closed. Nor did he neglect his calisthenics, for at frequent intervals he would take a vigorous turn in his cage, performing feats that excited our wonder. Sometimes he was taken out of his cage for a little while to make a meal on ants, of which he was especially fond.

My young birds always grew nervous as night approached, seeming to realize that a time of peril was coming, a time when they would be helpless in the power of an enemy. Back and forth they would flit, calling in a distressing way, until darkness had come, when they would settle quietly on the highest perches. It became necessary at night to cover the cages with carpet as they were too large to be moved into the house. Because I neglected to do this one night my pretty oriole's were destroyed by a cat. At first as I moved the cages about and covered them, the Thrasher and Jay became greatly agitated, but in a short time they knew what it meant, and would settle contentedly on their perches as soon as I began to arrange their bed chamber for the night. It really seemed as if they were safe from prowlers when thus protected.

Brownies discontent began when I put a young Robin into his cage. The Robin was about as old as himself, and had an independent and somewhat irritable disposition, and so when Brownie approached him, he, (the Robin) who now found his freedom greatly curtailed; for whenever he flew near the red-breast, that bird would snap viciously at him. I could see that Brownie was not happy and he seemed to look reproachfully at me, as if he thought I had done him a great injustice to obtrude that unwelcome robin upon him. When the cage door was opened he would try to escape. Several times he succeeded, and once he remained out in the trees so long that he was almost famished, and was glad to come back to his cage where his wants were all supplied.

But in a week he had forgotten his experience out-of-doors, and the spirit of discontent seized him again; so he slipped past me one day when I opened the door, and escaped to the tall trees of the yard. Supposing he would soon return I did not pay much attention to him. The day passed and when night came I could not find him. I felt very

uneasy about him on account of the presence of cats and Screech Owls in the neighborhood. The next morning he was nowhere to be found, and as he did not appear during the day, I concluded that his outdoor adventure had cost him his life.

Two or three weeks passed and Brownie was beginning to be a memory, when, one day an acquaintance living fully a block away invited me to visit him and see his pet bird, and tell him what its species was. From his description of the bird and his manner of securing him, I knew that his pet was Brownie. I went to call on him and from a mark on the bird's lower mandible made sure of his identity. The following is the story my neighbor told me.

One day he was sitting in his rear yard beneath a tree, when a brown bird, with feathers sadly bedraggled, flew down upon his shoulder, chirping and coaxing and fluttering in a pitiful way. The man rose and frightened the bird away, but the little wanderer saw an apple in the man's hand and dashed down on the hand and began to peck greedily at the apple. It was obvious that the poor bird was almost starved. The gentleman and his family gave their little visitor food and drink, of which he partook heartily, and then they placed a cage, with the door open on the porch. The bird soon entered the cage, where he seemed to feel that he had at last reached a place of safety. His plumes were crumpled, his tail was almost gone, and there was a raw place on his forehead, proving that he had passed through some dangers during the few days that he had spent out-of-doors. If he could recite the story of his adventures, it might prove an exciting tale.

For many months he remained in my neighbor's possession, a beautiful and cherished pet. It was not long before his feathers had grown again and I have never seen a Brown Thrasher clad in so rich a garb, almost as soft and smooth as velvet, its rich brown iridescent, while the groundwork of his vest was a sheeny cream color, picturesquely mottled and striped with brown. His golden eye was as bright and intelligent as the eye of a person.

He made rapid progress in his music lessons, and ere long the house was ringing with his dithyrambs, the quality and form of his songs being like those of the thrashers in their native wildwood. If given a hard piece of toast or a cracker, he would first soak it in his water cup, then eat it. By way of dessert he relished a fly or a spider, or an ant, while his staple diet was prepared mocking-bird food, varied with a good deal of fruit.

No bird pet was ever more devotedly loved or better cared for, and he seemed to reciprocate the affection lavished upon him. I am sorry to be compelled to say that his end was tragical. In attempting to

swallow a long piece of cord string it got wrapped around the root of his tongue, so that he could not release himself from it. When his agitated mistress tried to come to his relief, he gave the string a sharp jerk that pulled his tongue out of root—an injury that he did not long survive. His guardians were stricken with a grief that they could not describe without tears, and they mourned the loss of their pet as if he had been a human member of the household.



Photo by E. E. Johnson.

GREEN HERON.

ANSWERS TO QUERIES.

F. A. Currier, Mass.—Can you please name the following birds for me? No. 1. Small yellow bird about the size of an Am. Goldfinch, with black spots on each side of the head; found in a swampy place. (Maryland Yellowthroat.) No. 2. About the size of a Chippy Sparrow, yellowish head, greenish back and tail; below, clear yellow with short black stripes on side of throat and breast. Found on high land in low trees. (Prairie Warbler).

Geo. W. Fiske, Jr., Me.—Any paper except blue print is satisfactory. Solio, Aristo, Velox, or Vinco are perfectly adapted for reproduction. Prints may be either mounted or not. Solio toned in plain hypo makes a very good print and if thoroughly washed is absolutely permanent.

Mrs. J. G. Hutchinson, Iowa.—The bird you describe is the Orchard Oriole in the second year when it has the black face and throat. At this period they have the song perfectly developed and it cannot be told from that of the adult.

G. J. Giles, Texas.—A few days ago I saw a Phoebe guarding a part of our yard. It flew at every chicken which passed the spot, and snapped it's bill to drive them away. I looked there and found a young Phoebe in the grass. I did not know before that a Phoebe would snap it's bill. Can you tell me what kind of a Phoebe is found in east central Texas? (Snapping the beak is a common trait in all the fly-catchers.) Say's Phoebe and the Black Phoebe are both found in your locality, also the common Phoebe of the East during the winter. Without a description it would not be possible to say which bird you saw.

Edwin Troup, Ontario.—I had a rather unique experience yesterday, (Aug. 3). It was a purely albino Barn Swallow and evidently a bird of the year as it had down around it's eyes. It had probably been hatched in our own barn as a good many hatch there every year. It was entirely milky white except the shoulders which were pink. It was flying about a field near the shore of Lake Ontario nearly all day. Occasionally it rested on a wire fence near the house where it was watched by several persons with field glasses. I have never heard of an albino Swallow before and perhaps other reader may observe this one on its way south. (A number of albino Barn Swallows are in different collection and albinism probably occurs oftener in this species than among any of the other Swallows.



Address communications for this department to
 MEG MERRYTHOUGHT, 156 Waterville Street,
 Waterbury, Ct.

DEAR YOUNG FOLKS:

On one of our "Birding" trips a small boy remarked, "I think this is as much fun as playing." I judge by your letters that many of you spend much time in becoming good friends with the tree-top inhabitants. Do you think it is as much fun as playing? In one of my recent rambles a Catbird came from a thicket and scolded me loudly and long. Perhaps I passed too near the nestful of maltese catbirds. He made a great ado, seeming to think he was the sole owner of the jungle and screamed "no trespassing allowed here?" However, I was not sorry that he came out and spoke to me, for otherwise I might not have seen his curious plumage. The middle feather of his tail was pure white, which showed very clearly against his trim feathers of gray.

I think most of our young folks like "pi," so we offer you some this month. Do not hesitate to send in your answers if you cannot solve every puzzle. I would like to have you write also, what you like best in our department, and the kind of puzzles which please you the most. Keep your eyes open during September for the migrants who may call on you—dressed in their winter garb—on their way to sunny climes, hundreds of miles distant.

Cordially, Your Friend,
 MEG MERRYTHOUGHT.

ROLL OF HONOR.

Roy B. Noble, Cromwell, Conn.; Louise Jordan, Defiance, Ohio; Everett P. Walton, New Vineyard, Maine; William Schneider, LaCrosse, Wis.; Stafford Allen Francis, Exeter, N. H.

ANSWERS TO AUGUST PUZZLES.

ENIGMA NO. 1.

Devil Downhead.

ENIGMA NO. 2.

Catbird.

ENIGMA NO. 3.

Cardinal Grosbeak.

ENIGMA NO. 4.

Swallow.

 QUERIES.

1. The Grackle.
 2. Bob White.
 3. His feathers.
-

EXTRACTS FROM OUR MAIL BAG.

I want to tell the young readers to look out when looking in any kind of a nest. I made a bird house once and after several birds had been taking possession of it, I thought I would let some good bird have it. So I cleaned it out and it was taken right away by the Wrens, and after a while the English Sparrows took it. I went one day up to my bird house and thought I would see how many eggs there were in the nest. I put my hand in the nest, and I jerked it out pretty sudden, for I felt as if a needle was being put through my fingers. As I jerked it out a bumble bee followed, so I got away for a few minutes and then destroyed the bumble bees and the nest.

Another time when I was out in the woods I saw a large nest like a crow's. I climbed up to it and as I got to the nest a snake jumped out, so you see it is hard to tell whether it is dangerous or not. I hereafter inspect the nest before I use my hands in it. I wish the AMERICAN ORNITHOLOGY good success.

FRANK F. FRANCE,
Platteville, Wis.

I thought some members of our "bird corner" would like to hear about my adventures at Roslyn, L. I.

My brother had heard from Mr. Chapman that there was a very famous heronry there, so we thought we would like to go and visit it. We started out one morning with all our photographing apparatus, camera, tripod, tubing, etc. When we got there we found a pretty

decent place or rather house to stay in over night. We started out the day we arrived to the heronry and found it simply full of Black Crowned Night Herons and nests.

We found a nest that was sixty feet from the ground and my brother climbed up and photographed the eggs which were in the nest. It took him a long time as the nest was in such a bad place. At last we rigged up a fake camera and left it by the nest, hoping to get a picture of the mother bird sitting on her eggs, which no one has been able to accomplish. We went home that night leaving the fake by the nest.

Next morning we got some crackers and chocolate for our lunch and started out for the heronry again. My brother climbed up again and put the real camera in the place of the fake one. He tied a long black thread to the shutter and let it down to me. He then came down himself. He hid me where the birds could not see me from the nest. He said that he would go a long way off and give a low whistle when the bird was on the nest, so that I would pull the string.

Now there happened to be another nest right next to this one. We focused on one of the nests, but neither bird came. My brother said, "let's focus on the other." So up he went for the third time and focused on nest number two. Then, of course, the bird came on nest number one. For the fourth time he went up and focused on that nest, but neither bird came.

It was now growing dark and we could not see to take any more photographs, so we went home that night and tried to be satisfied with the luck we had had in taking the eggs which came out very well.

CLARENCE C. ABBOTT (age 10),

New York, N. Y.

There is a small pond not far from my house and as I was walking around it the other day I came suddenly upon a Black Duck swimming in a small inlet. I stood perfectly still and the duck after looking at me a minute, slowly sank from sight, keeping the same position that he was swimming in. (head erect).

I watched closely to see where he would come up. After a while I saw a faint ripple about eighty yards away and a small black head came up about an inch out of the water and in a second was gone. Pretty soon it came up again about eighty yards from where it first appeared. It then sank as before. He did this three times in all and then came up for good. If I hadn't seen the duck's head as it rose, I should probably have thought the ripples were made by a fish rising to the surface.

STAFFORD A. FRANCIS,

Exeter, N. H.

PI.

The *Talagalet* or Brush Turkey lives in Australia. It is of blackish brown color and is almost as large as our domestic *ketruy*.

The *Talaglet* are usually found in small *sclofk*, and make their *stens* together, heaping up with their feet immense mounds of *reath* and decayed *veales*, which are used year after year. Each egg is separately *drieub* and *thached* by the *thea* of the *nus*, and the fermenting *treak*. They are partially uncovered by the parent birds during the day. Nearly a *shelbu* of eggs are sometimes found in one heap.

 WHAT IS MY NAME?

I am a bird about as long as a Bobolink with olive-green plumage and brown wings, and two very long feathers in the center of my tail. My home is among the gardens and jungles in China and India. I make a safe, cosy cradle for my babies by sewing other leaves to a green leaf hanging down from a tree, using my bill for a needle, and wool or vegetable fibres, or silk from cocoons for my thread. This cup I line with soft plant down and grass. Here no snake or monkey can disturb my little ones in their swinging home.

 CHARACTERISTIC INITIALS.

What birds are these whose initials appear in capitals below, and whose songs, colors, or habits are thus described?

1. Builds Eyrie.
2. Prettily Flushed,
3. Intrepid Beauty.
4. Fearless Character.
5. Sorrowful Outcry.
6. Cherries Wanted.
7. Ever Surplanting.

 HIDDEN BIRDS.

In each of the following sentences, if you look carefully, you will find the names of some well known birds.

1. Why Rob, I never thought it was you.
2. "Mamma," said little Willie, "Bob W. hit Esther on her head."
3. Grace is below Lillian in the spelling class.
4. The widow rented the white house on the farm.

MARIETTA WASHBURN,

Goodwin, S. D.

ENIGMA.

I am composed of 23 letters.

My 7-21-12-9-5-17-22-18 is a small but lively bird.

You should 1-2-11-8-10 the birds when they come back in the spring.

My 13-14-15 is a household pest.

If you are 3-4-5 well when you are young you will never 7-11-1-2-21-18 it

My 16-20-11-9-9 is a fine game.

6-20-8-4-10 yourself rather than your friend.

Don't 19-22-15 about trifles.

My whole is a bird which builds a queer nest.

STAFFORD A. FRANCIS,

Exeter, N. H.

 GLEANINGS.

"The sobered Robin, hunger-silent now, seeks cedar-berries blue,
his autumn cheer."

A singular accident is reported from Utica, N. Y. A few days ago a large Blue Heron alighted on a wire carrying power from the Newton Falls station to one of the local sub-stations of the Utica and Mohawk Valley R. R. Co., and shortly thereafter the bird's bill came in contact with another wire. Immediately the current was cross-circuited, the fuses at the sub-power station burned out, the wires broke, the power stopped and the 22,000 volts that the wires carried wrought havoc with the bird. Scores of trolley cars on the city and suburban line were stalled and for five hours, or until the cause of the mischief was discovered and the damage repaired, all electric traffic in the Mohawk Valley was suspended. (CHRISTIAN HERALD.)



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| 6 Ruffed Grouse on Nest. | 31 Five Young Chickadees. |
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| 14 Prairie Warbler (male) Feeding Young. | 39 Bluebird at Nest Hole. |
| 15 Prairie Warbler (female) and Nest. | 40 Barred Owl. |
| 16 Red-eyed Vireo on Nest | 41 Screech Owl. |
| 17 Red-eyed Vireo Feeding Young. | 42 Four Young Screech Owls. |
| 18 Wilson's Thrush and Nest with Eggs. | 43 Young Blue Jays. |
| 19 Wilson's Thrush Feeding Young. | 44 Blue Jays in Nests. |
| 20 Chestnut-sided Warbler on Nest. | 45 Blue Jay Feeding Young |
| 21 Ovenbird and Nest. | 46 Loggerhead Shrike. |
| 22 Black and White Warbler on Nest. | 47 Phoebe on Nest. |
| 23 Field Sparrow Feeding Young. | 48 Hairy Woodpecker. |
| 24 Field Sparrow Cleaning Nest. | 49 Chimney Swift. |
| 25 Young Field Sparrow. | 50 Four Young Crows. |

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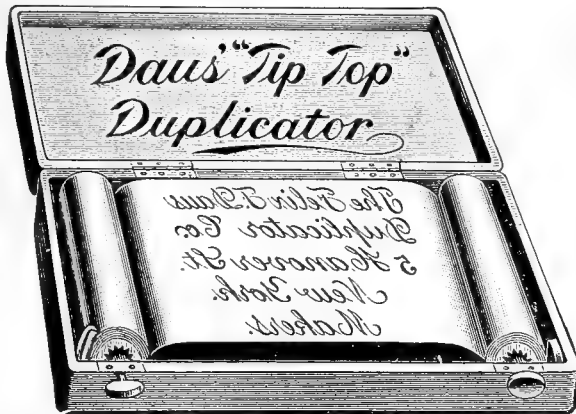
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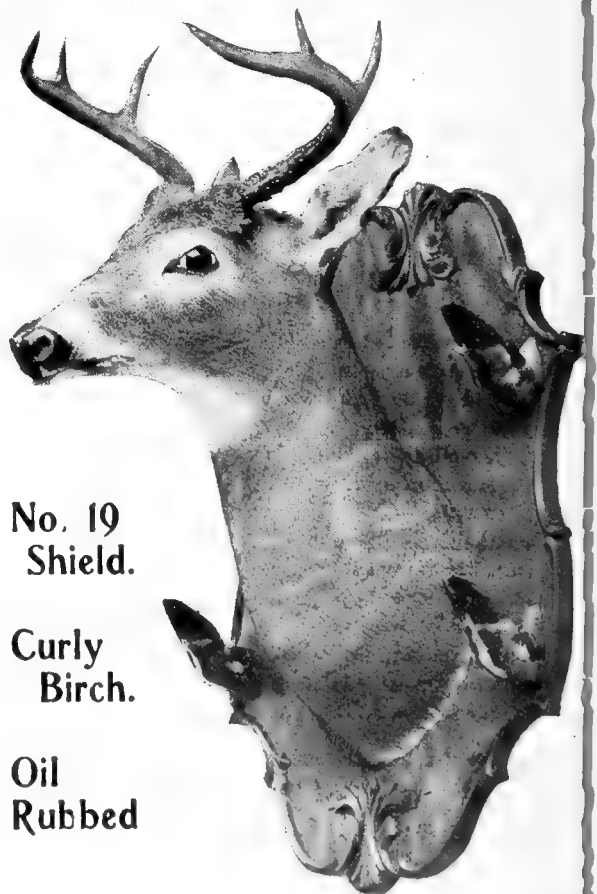
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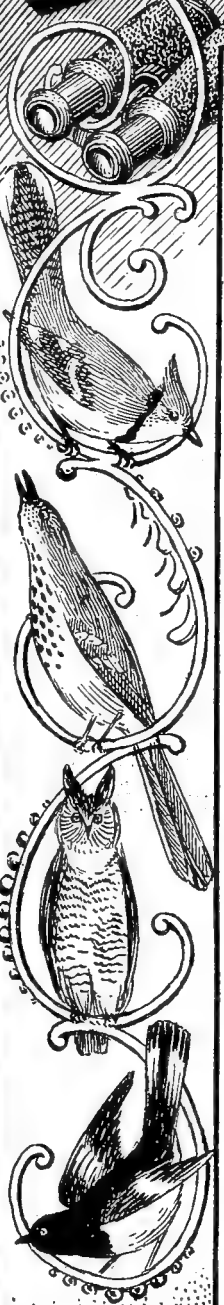
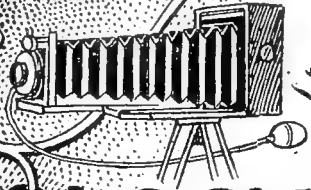


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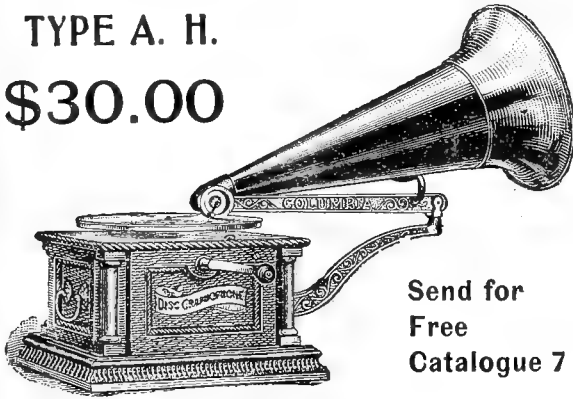
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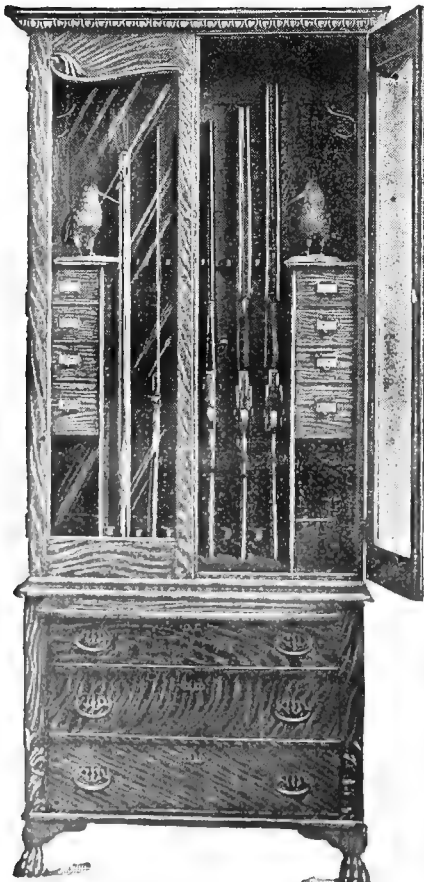
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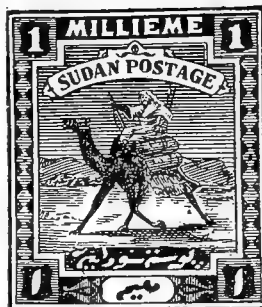
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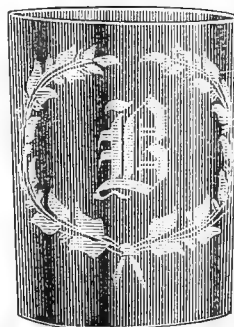


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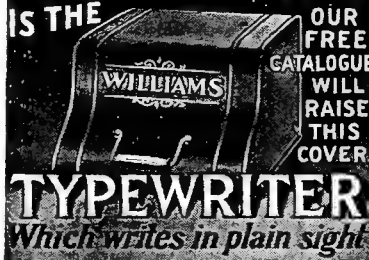
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VOL. III

OCTOBER, 1903.

NO. 10

Quite a number of our subscribers seem to be anxious to know if we are to give a premium with new subscriptions or renewals next year and what it is to be. Although it is a little early, we are willing to satisfy their curiosity. We have concluded that a fine Art Bird Calendar will be the most appropriate premium that we can offer. Contrary to what appears to have been the idea in other bird calendars in the past, we intend to have our birds absolutely true to life in both coloring and markings. It is now in the hands of the engraver and will be ready for delivery December 1st. We have every reason to expect that it will be one, if not the most attractive bird calendars ever published. We have contracted for a number equal only to our present subscription list, consequently orders will be filled in the order received until the supply is exhausted; consequently it will be necessary to order soon after the first of December if not before, in order to be sure of getting one. Renewals may be sent in at any time and they will be advanced one year from the date on which the present subscription expires.

AUTUMN.

EDWARD BAMFORD HEATON.

There is a cadence in the whispering woods,
Tintings innumerable midst fading green;
As if sweet Nature nourished many moods,
Glad on the hills, pensive in vales between.
Sooth, loth is she to change the summer sheen
For all the dyes which Autumn's fingers lay
On wood and prairie, deep'ning with each day.
Softly Zephyrus waves the aster's crown,
The fringed Gentian drops her cup of blue;
Aloft floats lazily the milkweed's down,
Floats on and on, we wonder as we view,
And long with it to float to landscapes new
Where hills in mist and languorous valleys lie
Mysterious, past the curtains of the sky.
The grove is silent, save for garrulous jay,
Or the hoarse croak of slowly flapping crow,
Or merry chatter where the chipmunks play,
And on the prostrate log chase to and fro.
No more the forest aisles a song shall know,
Until that morn, when from his hills divine,
Clad with fresh beams, Spring's mounting sun shall shine.
The year is halting; See! his face is old!
Scant grow the leafy honors of his head;
Gone is that jocund look, that frontage bold,
Which Spring and Summer on his features shed;
For he on nectar and ambrosia fed—
Nourished by bees and steeped in honey dew
He wotted not of Time, how swift he flew.
Within the copsed-fringed openings of the wood
The wind the brown nuts strew along the ground;
Glad youths with laughter rouse the solitude,
And fill the welkin with a merry sound.
In Autumn's hands the season's wealth is found,
Huge pippins and the russet's golden glow
And all the sweetness which the months bestow.
The breaths of night have bleached the maize-filled plain,
Ricks, clover-scented, shapely, fill the scene;
The threshing floors are full of golden grain
From the deep bays the mighty beams between;
Gathered where turtle-doves the stubble glean,
Where whistling quails salute the hazy noon,
And soft-winged owlets sport beneath the moon.
Yet oft there comes from the inclement north
Breathings which startle, thoughts that fill the eyes
With apprehension, for there stalketh forth
Snow landscapes, sheeted hills, and drifting skies,
And mountains bound, and forests in disguise,
And cattle shivering in wintry shed,
And the whole world lying stalk and dead.

ARCTIC TERN.

No. 71.

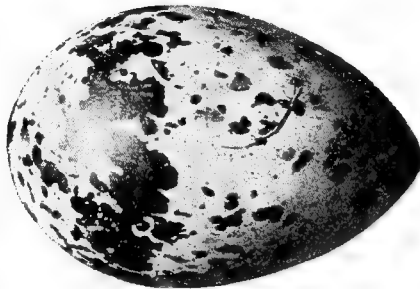
(Sterna paradisaea.)

RANGE.

Generally distributed throughout the Northern Hemisphere; breeds in North America from the New England States northwards and winters towards the southern parts of the United States.

DESCRIPTION.

Length from 14 to 18 inches according to the length of the tail; extent about 30 in.; tail from 7 to 8 in. Adult in summer:—Bill slender and acute, and of a deep red color, usually without any black on the tip. Feet unusually small and weak and of a slightly paler shade than the bill. Upper parts pearly blue fading into white on the tips of the secondaries and on the tail. Under parts a little paler than the upper. A broad black cap extending from the bill to the nape and including the eyes. In winter the difference is chiefly in the black cap. The forehead is then white as is the greater part of the crown, shading by lines into the black crescent that is around the nape. Young similar to the winter adult except that the back is somewhat mottled with dusky.



NEST AND EGGS.

Breeds abundantly on both the coast and interior from New England northwards including Alaska. They breed in colonies generally on a small island. Their nests are placed anywhere above high water, either on the sand or in the short marsh grass. A slight hollow lined with a few grasses is the limit of their ambition in the nest building line. They generally lay three eggs, and rarely four and probably five. The ground color of these varies from a blue green to an olive buff and they are specked and blotched with various shades of brown and lilac. In size, color and markings they are indistinguishable from those of the Common or the Roseate Terns. The Common and Arctic Terns are frequently found nesting on the same islands.

HABITS.

This "Sea Swallow" is a more northerly distributed bird than the Common Tern, although in some of the more southerly breeding



ARCTIC TERNS.

places, the latter are associated with them. They are one of the most graceful creatures that flies, and one who has not seen them can form a faint impression of them by watching the gambols of a Barn Swallow, whose manouvers over the land are outdone by theirs over the sea.

Nearly every harbor and bay along the Atlantic coast has it's Tern island, although the casual observer would never be aware of it. A few Terns may be seen floating, sailing, turning or diving but one would be unaware of the hundreds and sometimes thousands that are ready to take flight as soon as a foot is placed upon their island, when from the shrill cries one would imagine that they had stumbled upon a nest of huge hornets. They are of a timid nature and beyond making a great outcry, they rarely make any attempt to defend their homes, although frequently one more bold than the rest may make a dash uncomfortably close to the observer's face and cause him to unwittingly duck his head. Their chief anxiety appears to be in seeing a large object moving on their island, for if you cover yourself up with an old sail or even if you sit down and remain perfectly still they will gradually come back and settle upon their nest, only to fly off with louder outcries than ever when you start to leave. Their little fluffy gray young ones are very cute both in looks and action, for they will cuddle down and remain perfect'y still, thereby making themselves look exactly like one of the surrounding stones, and very often escaping observation.

Owing to the very efficient protection that is generally being given them now, it appears as though they would increase in numbers and maintain their place along our shores instead of disappearing as they were in a fair way to do a few years ago.

HUDSONIAN CURLEW.

No. 265.

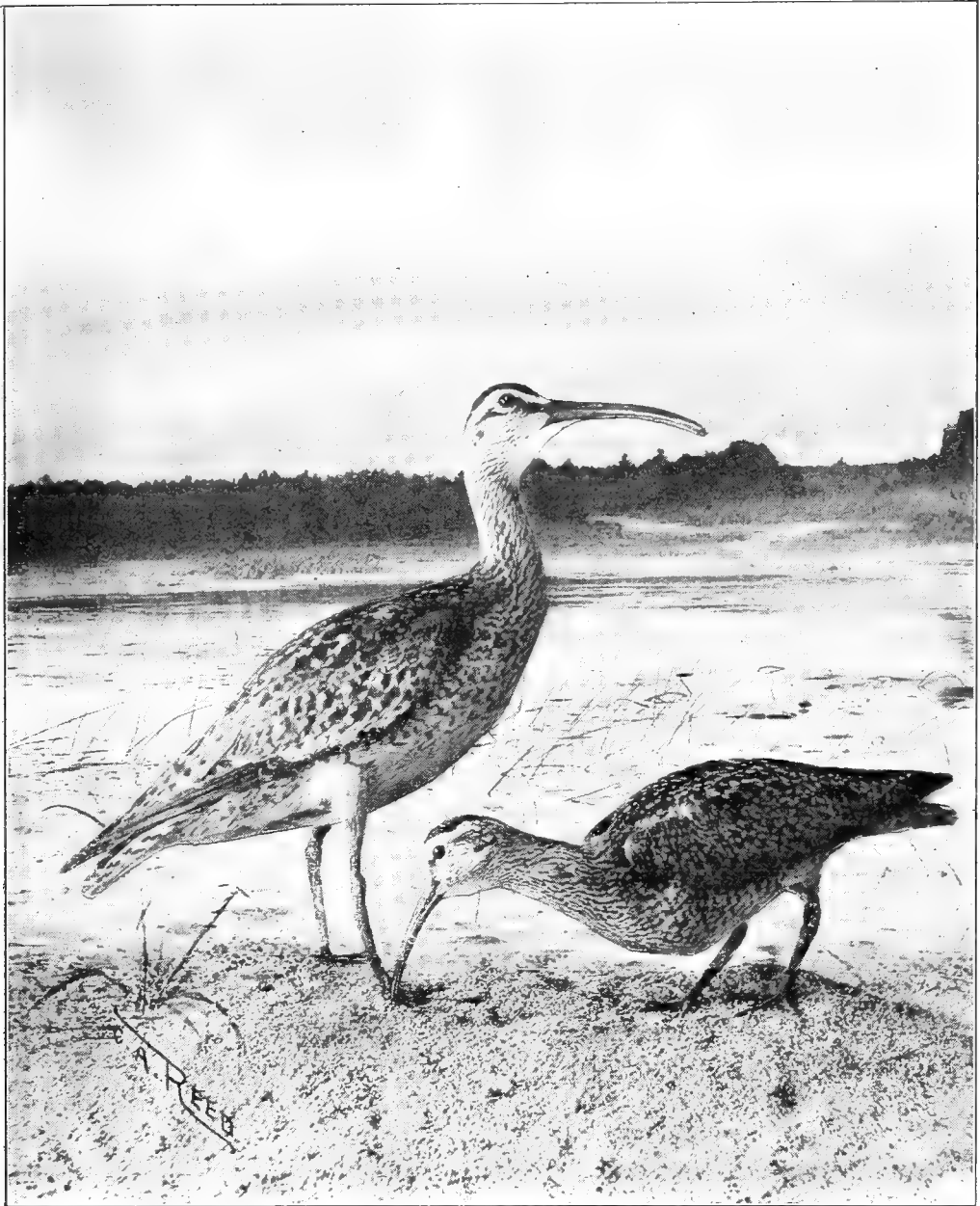
(*Numenius hudsonicus*.)

RANGE.

Found throughout the whole of North and South America; breeds in the far north and migrates to the far south.

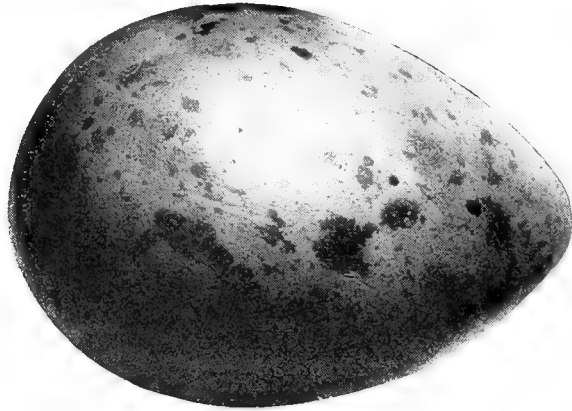
DESCRIPTION.

Length about 18 in.; extent 32 in.; tail 3.5 in. Bill curved and between three and four in. long. Upper parts variegated with brown and whitish. Top of head blackish brown with a prominent median and lateral stripes. Tail ashy brown with numerous black bars. Under parts dull white streaked with brownish on the neck and breast and with arrow shaped spot on the sides and under parts.



NEST AND EGGS.

The Hudsonian Curlews nest about marshy ponds in the far north. The eggs are laid in a slight hollow in the ground; this is nearly always lined, but sparsely, with a few dried grasses. The eggs are deposited about the middle of June. They are three or four in number, pear shaped, with an ashy greenish ground and boldly dashed and spotted with umber.



HABITS.

This wader is known among gunners in different parts of the country by various names. Perhaps the more common are Short-billed and Jack Curlew. These birds are less common than the larger and longer billed Curlew and not nearly so numerous as the smaller Esquimaux Curlew. They are also deemed to be more wary. They are a great deal more often met with in the interior than on the sea coast, frequenting marshy ponds in preference to more open bodies of water.

Especially does this apply during the breeding season. During the winter flocks of ten or twelve individuals may be met with occasionally along the coast, although more often there will be but two or three individuals among a flock of some other species of waders. As they are exceedingly good eating they are persistently hunted during the season. Although exceedingly shy they are very easily decoyed by a clever imitation of their whistle. Their flight during migrations is generally accomplished in the form of a wedge. They always alight facing the wind, especially if it should be blowing at a good rate, so if their flight happens to be with the wind they will fly past their intended alighting place and swooping up into the wind drop gently down to the ground with upstretched wings. They are excellent swimmers and frequently get beyond their depth while wading for food.

In winter they feed chiefly on small crabs, worms and minute crustacea. In summer they add to this diet numerous insects and various kinds of buds and berries. Their call is uttered while on the wing and

is a whistle that may be likened to a repetition of their family name "Curlew."

During the latter part of April they pass us on their way to the breeding grounds which are in the Arctic regions, mainly in the interior. Here during June their set of eggs is laid. These are very large for the size of the bird and are very dark colored. The young follow their parents almost as soon as they are out of the shell and are devotedly attended by the latter.

If approached they hide behind a stone or squat down in a hollow where they attract surprisingly little notice, the parents in the meantime doing their best to attract the intruder away. During the breeding season one of the adults may often be seen standing on one foot, dozing on a fallen down or decayed tree. As soon as the young are strong enough, the family starts on it's southern, journey which frequently continues until they reach the extremity of Patagonia in South America, thus making one of the longest migratory flights of any of our birds.

OUR FEATHERED NEIGHBORS.



A few years ago, while living in the village of West Grove, Chester county, Pennsylvania, I observed an unusual number of different birds in our own immediate yard and garden, nearly all of which built their homes within the narrow limits of our property. Being deeply interested in bird doings, and appreciating their friendship and confidence, I carefully watched the progress of their daily labors, and their respective traits and individual habits. Our buildings consisted of a house, small stable and carpenter shop, and I was much gratified to see so many pretty birds nesting at our very doors.

In the front yard stood three tall pine trees. In one of these a pair of Black Birds made their nest and reared two broods of young, and a Gold Finch also chose one of the lower branches of the same tree, in

the forks of which the clever little fellow built a most beautiful cup-shaped nest. It appeared to be made of various mosses, lichens and soft materials, closely woven and cemented together, and the lining inside consisted of thistle-down. Four pretty eggs were deposited in due course and, as far as I know, the young were safely raised and departed with their parents in the Fall. I had the pleasure of seeing the entire family frequently perched on the seed salad stalks in our garden feeding in fearless content.

On both sides of the front porch was a lattice covered with woodbine. In the top of one of these a Robin chose to build her home and showed remarkable tameness during the entire nesting period. On the back porch, also covered with woodbine, a pair of Chipping Sparrows built their nest, a beautiful little piece of workmanship, displaying skill and good taste. A happy little family was raised here in safety. Not ten feet from the Chipping Sparrow's nest, we nailed up a little wooden box which was tenanted for several years by a pair of House Wrens—in all probability the same two. These little birds afforded us many hours of pleasure watching their cunning ways and listening to their cheery song. In another box raised on a high pole in the garden, we had a pair of Purple Martins for two seasons, and they helped to swell the population of our bird community. Placed in a hedge row bordering the yard, I observed each year, the nest and eggs of a Song Sparrow, and their happy notes were to be heard all day long. Near this hedge stood a willow tree, in the drooping branches of which (high up) a Baltimore Oriole swung her basket nest and added her sweet vocal powers to the summer concert. In a small briar patch in the corner of the garden, a Cat Bird made her home and became quite tame, raising four little ones successfully. In the eaves of the shop (although not wanted or cherished) the English Sparrows held sway, and we destroyed their nests and eggs on many occasions, as they repeatedly tried to drive away some of our other pets.

Summing up we have a total of ten birds which nested within our small domain, and in each instance they seemed to feel a sense of security and protection from all harm. In addition to those nesting on our premises, we were favored with frequent visits from many more, such as Vireos, Orioles, Cardinals, Indigo Birds, Chickadees, Nuthatches, Snow Birds, Sparrow Hawks, Flickers, Pine Finches, etc., according to the time of the year.

Prior to the summer in question, my father had been very ill, and as he was then getting better he spent many days on the porch. This afforded ample opportunity for him to study our birds, and they in like manner became so accustomed to his presence that they were quite

fearless. Especially was this the case with the Chipping Sparrows above mentioned. They became unusually tame during the season, and the mother bird finally ate out of father's hand or would sit on the toe of his boot and pick crumbs from his fingers.

Father kept a little tin box close by in which he had small pieces of rusk and bread, and the birds soon became aware of this fact, and he had only to rattle the box a little; when the mother Chippy and her little family would come down from the trees and sit on the porch floor waiting to be fed.

BERTON A. MERCER.

THE WESTERN NIGHT JAR.

The instinct that prompts both bird and beast to shield and protect from harm, their young, has been, is, and always will be, one of the strong characteristic traits of the animal world. This predominating disposition is shown from the cruel, treacherous tiger, down to the delicate humming bird. Innumerable instances might be given.

All persons acquainted with Natural History know to what cunning tactics the ordinary quail and pheasant and other birds will resort to lead the chance intruder away from the vicinity of their nest or helpless young. The birds will feign disablement, flutter about as if wings and legs were broken, etc., so as to be followed and thus decoy persons away from the spot.

One of the most artful and cunning of all birds at practicing this deception that I can recall is the well known "Night Jar." Both in the Old World, and on the Western Hemisphere, this bird is variously known as the "Nighthawk," "Goatsucker," "Fern Owl," "Churn Owl," and by other sobriquets.

Essentially, it is a bird of the night. It is a nocturnal wanderer, and with our childhood memories the Night Jar is always associated with the dying day, the mellowing gloaming and the gentle summer evening. Its plaintive "cher-r-r-r," from the sky, its wide, wheeling flight, its rapid downward swoop, and loud jarring notes are familiar sights and sounds to all of us.

Like the owl, the Night Jar is silent and hidden in the grayish light of day. Before daylight the bird flits away to some quiet sequestered spot. Most any place that affords seclusion is chosen for a temporary retreat. Clefts in the rocks, under logs, in hollow stumps, under brushy and weedy coverts, on limbs of trees, are its favorite daylight resorts.

Its color is so peculiar that it readily assimilates with its surroundings, and is not so easily distinguished. In selecting its day retreats, the bird shows its cunning instincts of self protection.



Photo by J. E. Seebold.

NIGHT HAWK ON NEST.

Though the Night Jar can boast of no brilliant plumage, yet there are certain rich markings—a harmonious blending of colors—black, brown and a suggestion of yellow. The abnormally large head, half hawk-like beak and the large, beautiful eyes, with their soft, touching, melancholy expression, are distinguishing features that attract and elicit admiration.

The Night Jar expends neither time or labor in building its nest. It is even more careless than the mournful cooing dove in this respect. The eggs are deposited any where on the ground, generally in some little hollow or slight depression. Two eggs are usually laid; but very rarely more than that number. The eggs are of a dark greenish color, and may be readily taken for speckled pebbles, unless closely inspected. From two weeks to 20 days are required in the incubating process. The female never deserts the nest, unless in quest of food. She seems to be entirely alone during the hatching period, for I have never yet seen the male in attendance, or show any domestic disposition.

If one comes suddenly upon the bird when she is setting, it is with the greatest reluctance that she will desert her post. One may approach within a few feet—nay even almost place a hand on the mother bird. Only as a last extremity will she desert her charge. She will look at one with her great liquid eyes with such an appealing expression, hovering and fluttering, meantime, around her eggs or callow brood, as if begging the intruder not to harm them.

Should anyone discover the Night Jar in the vicinity of her nest, without having seen the latter, the bird will instantly resort to strategy to lead the person away. Many times have I had such an experience. Knowing the bird's cunning deception, I have often "humored" her trick, following closely in the halting, fluttering walk. She would move in all directions, almost under my very feet at times, making frantic struggles as if badly crippled. However, the bird was too wise and too quick to ever allow me to put my hands on her.

If followed persistently, the Night Jar will lead one away from the nest for what she considers a safe distance. Then suddenly she will take wing and soar away, but never in the direction of eggs or brood.

I have often paid no attention to the bird's efforts to decoy me away but would remain near the spot looking for the nest. These tactics would make the mother all the more frantic. Sometimes she would fly almost directly into my face to make me desist, and in various other ways seek to direct my attention to herself.

Occasionally I have tenderly picked up the young and held them for a few moments in my hands. Such actions never failed to greatly excite the mother. She would flutter wildly all about my head, uttering



Photo by J. E. Seebold.
NEST AND EGGS OF NIGHT HAWK.

plaintive little cries, and would never cease until I replaced them in the nest.

Young Night Jars soon acquire the use of their wings, when they flit away with the parent bird. The Western Night Jar is a very harmless, inoffensive creature. Its principal food are flies, gnats and other winged insects. These are caught by the bird in its twirling zigzag flight through the darkened air. Often they approach very near the earth, flitting hither and thither in the mad chase. They are very swift of wing—nearly equalling the Swallows in speed and seem tireless.

Out west, particularly in the northwestern states, the Night Jar is a migratory bird, and is only seen during the spring, summer and early fall months. However, there are exceptions, for occasionally I have seen and heard them as they flitted through the dark, wintery skies. During the warm season these birds are seen in large numbers in some regions of the west. The breeding season extends from the middle of May to the first of August.

“Bull-bat” is another slang name given to this peculiar bird. This appellation is due to its large, chubby-shaped head, and the fact, that, bat-like, it flies mostly during the night.

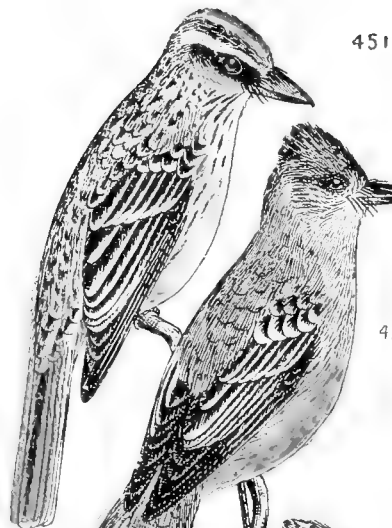
If discovered and disturbed during the day in its retreat, the bird will swiftly flit away to some other congenial covert.

J. MAYNE BALTIMORE.



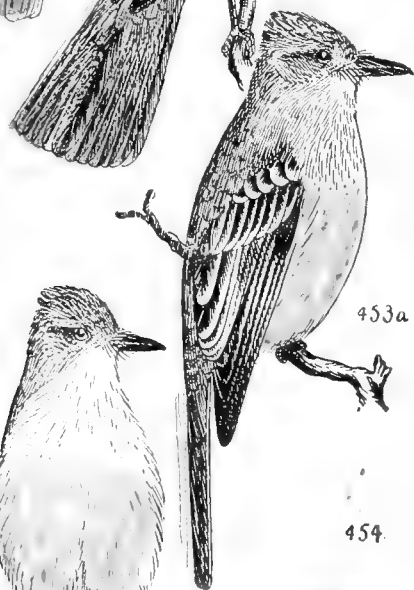
Identification Chart No. 21.

FLYCATCHERS.



No. 451. Sulphur-bellied Flycatcher, (*Myiodnastes luteiventris*).

Found through Mexico and Central America; north to southern Arizona. Length 8 in. Upper parts olive brownish, the feathers having black centers. Crown with a yellowish median stripe bordered with dusky; a white superciliary stripe; a black stripe from bill through eye. Under parts pale yellow, shading to white on the throat and streaked with black. Wings blackish, broadly edged with whitish. Tail and upper coverts bright rufous with black streaks in the centers of the feathers.



No. 452. Crested Flycatcher, (*Myiarchus crinitus*).

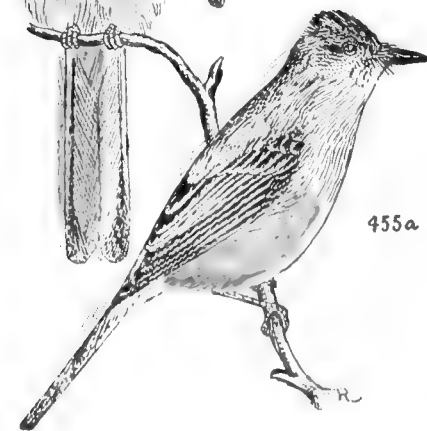
United States east of the Plains and north to southern Canada. Length about 8.5 in. Head, throat and breast ashy gray; lower breast and under parts yellow; back olive gray; wings, blackish, edged with white and the inner webs of the primaries chestnut, as are the tail feathers.

No. 453 a. Arizona Crested Flycatcher, (*Myiarchus mexicanus magister*.)

From southern Arizona south into western Mexico. This is a paler form than the preceding, and the ashy throat, while lighter is more clearly defined against the lemon color of the under parts.

No. 454. Ash-throated Flycatcher, (*Myiarchus cinerascens*).

Western portions of the United States from the Rocky Mountains to the Pacific and from the latitude of Oregon south through Mexico. Still paler than the above, the ash in the throat being replaced by a dull white.



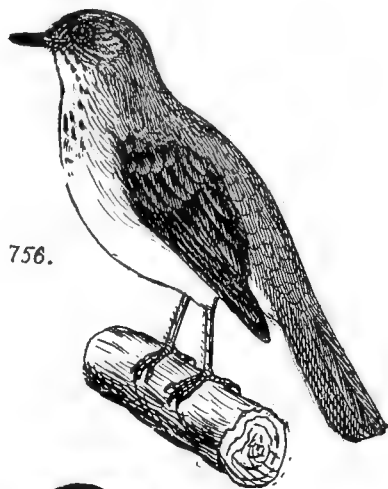
No. 455 a. Olivaceous Flycatcher, (*Myiarchus lawrenceii olivascens*).

Arizona and Western Mexico. Back an olive green. Tail and wings with less chestnut on them.

THRUSHES.

No. 756. Wilson Thrush, (*Turdus fuscescens*).

Southern British Provinces and eastern United States; south in winter to Central America. Length about 7.5 in. Upper parts a pale reddish brown with hardly any olive tint. No great contrast between the color of the back and tail. Below white with the sides and breast grayish and the latter also with faint spots of dusky.



No 756a. Willow Thrush, (*T. f. salicicola*.)

Found in the valleys of the Rocky Mountain Region. This species lacks the tawny coloring on the back that the preceding one has. Otherwise it is very similar.

No. 759. Dwarf Hermit Thrush, (*Turdus aonalaschkae*).

Very similar to the Eastern Hermit Thrush except that it is smaller, and somewhat darker. Pacific coast regions of North America.

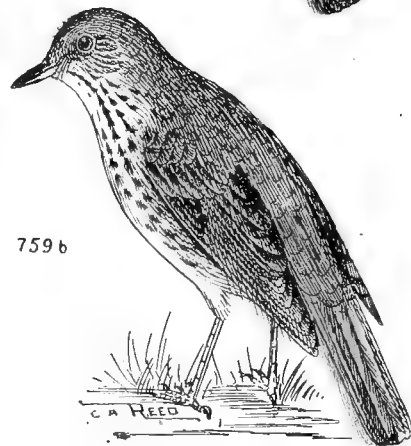


No. 759a. Audubon Hermit Thrush. (*T. a. auduboni*).

Rocky Mountain region. A slightly larger variety than the following, being 7.75 in. in length.

No. 759b. Eastern Hermit Thrush, (*T. a. palasii*).

Eastern North America and breeds from the northern states northwards. Length about 7.25 in. Upper parts an olive greenish contrasting greatly with the bright reddish brown of the tail and upper coverts. Under parts white shading into grayish on the sides. Throat pure white but the breast and sides quite heavily spotted with dusky.



A HUMANIZED JAY.

BY MARGARET WENTWORTH LEIGHTON,

24 Melrose Highlands, Mass.

It was on a Sunday afternoon in mid-June that little J-J came to the home of his adoption. His budding wings were tinged with exquisite blue, and his tail had just begun to peep forth, a row of blue feathers a quarter of an inch long tipped with white. He had been in our possession less than ten minutes when he opened his mouth (a fiery red cavern almost large enough to engulf his whole person) and cried for food.

"What shall we give him?" was the momentous question.

"A worm," suggested one.

"Some bread," said another.

"Try raw egg," spoke a third.

J-J accepted all of these suggestions with alacrity. He gobbled down worm after worm, and as for the egg he tried his very best to swallow the spoon every time a dose was administered to him. After a hearty meal he settled down with his head beneath his wing for an after-dinner nap, but what was our dismay, when scarce five minutes had elapsed, to hear our pet calling as lustily for food as though he had been fasting half a dozen hours instead of minutes.

For the first fortnight a great deal of time was devoted to this little gourmand for what was one to do when he cried so piteously and fluttered his wings so appealingly? At the earliest glimmer of dawn he awoke ravenously hungry and began to scream lustily and beat about the cage, breaking his wing and tail feathers in his mad attempts to burst his prison bars. These struggles continued with slight intervals for rest until six o'clock, when we appeared and were rapturously welcomed.

During the second week of his adoption he learned to pick up a wriggling worm from the ground, but when flies were given him they invariably escaped until it occurred to me to clip their wings before offering them to him.

J-J was a most affectionate little being, The burden of his song was "To be near thee, to be near thee, alone is peace for me," and his life text "Whither thou goest I will go; were thou lodgest I will lodge, and thy people shall be my people." If I seated myself at one side of the room and he was in another part of it, his first act was to fly as near to me as possible, perching on my shoulder or head when he was allowed to do so. He loved to sit on the typewriter and listen to its click click. He would follow us all about the house and yard, and watch with deepest interest whatever work was in progress.



Photo by Ernest Harold Baynes.

J-J'S FIRST HOME.

While I was studying him he was evidently at the same time making a study of me. Beside watching closely all my occupations he explored the labyrinth of my ear, and tried to pick off the few freckles with which I am ornamented.

Our back piazza is broad and shady with a flat railing running around two sides. This railing was J-J's chief delight. He would trip back and forth, flitting from side to side, his crest raised and his wings spread in an ecstasy of joy. No sooner had I established myself for writing or sewing than he would skip over to my table, tear a bit from the first loose paper he could seize, and hide it beneath some of the other papers. His eye was speedily attracted by anything glittering. The scissors were an unending wonder to him. Rings and bracelets he tried with all his little might to peck or pull from their owner's arms or fingers. One unlucky day he espied my thimble on the window ledge and taking it in his beak danced about in the greatest glee.

Sunday was an eventful day in J-J's life. Just back of the piazza is a high stone wall, the boundary of a piece of wild land on which grow



Photo by E. Harold Baynes.

J-J.

young oak's, cherry, hop hornbeam and hickory trees. This is a favorite resort of birds that come to feast on the seeds of the hop horn beans and the cherries. Sometimes J-J was tied with a long cord to one of these trees where he delighted to flit about among the low branches, but I had to keep my eye almost constantly upon him lest he unwittingly committed suicide by hanging. On the third Sunday morning after his arrival he was tied in this grove when all at once a piercing scream rent the air. It was so entirely different from any sound he had ever uttered that I could not believe it came from him till I saw a beligerantly inclined robin dashing at him. I rushed to the rescue and from that time forth J-J seemed to consider all birds his natural enemies. When he was held up to a mirror he gave the same frightened screamed and struggled to get away from the Jay in the glass. At another time he was introduced to a mounted Partridge. This he at first regarded with abject terror but after close observation and considerable reflection he decided to challenge it to fight and uttered several screams of defiance. When it was moved toward him he flew at it, attacking it furiously with his powerful beak. As he flitted to and fro on the railing his Jay folk often flew near and were almost



Photo by Chas. P. Price.

J-J ON A FAVORITE PERCH.

constantly screaming to each other in the trees close by. He generally regarded them with complete indifference.

He amused himself for hours hiding scraps of paper, chips, pebbles, bits of glass and surplus food in nooks and crannies among the rocks and moss, or if in the house under the furniture or in out of the way corners. Sometimes he dropped a tiny pebble into a rip in my shoe between the sole and the upper. Then he cocked his heed on one side and peered down the hole saying as plainly as words could do, "where has that pebble gone?" This habit is instinctive with Jays and their cousins, the Crows. It is said that thousands of trees all over Arizona have been planted by the Jays burying the seeds, mostly pine nuts.

J-J religiously practised Mr. Hale's advice to look up and not down. His eyes were ever cast heavenward. He liked to watch the Swallows skimming high in the blue and listen to their lively twittering. He loved to reach the highest perch that he possibly could and ever aimed at the tree's topmost bough.

It was on the same Sunday he had the adventure with the robin that he was initiated into the delights of bathing.

I offered him a tin hand basin half filled with water. He hopped round and round it, finally alighting on the edge, but as to plunging in, would he dare? Not quite, though he made a feint at it. When a flower pot saucer was given him he eagerly hopped in and began to flutter his wings and tail and duck his head with the sang froid of an habitual bather. Later in the day he went to walk, riding on my wrist. He needed but a hood, and I a white palfry, to transport us back into the days of chivalry, when ladies rode forth to the hunt with their hooded falcons on their wrists. In the course of our wandering we came to a tiny brook threading its way through a tangle of wild roses. jewel-weed and ground-nut vines. Here we seated ourselves to rest and no sooner did J-J spy the sparkling water than he hopped down and took another plunge.

Whenever he felt like having a splash, even though the day was cold and rainy, he knew how to ask for it. He had two ways of doing so which spoke as plainly as words could do. The most appealing was when he crouched, breast down upon the floor and fluttered wings and tail as if he were already in the water. The second was when he jumped on to the edge of his drinking cup, dipped in his head as far as possible, then lifting it gave it a vigorous shake that sent the drops flying half across the room.

During J-J's second month he was introduced to an old toad in the garden that had grown plump on the caterpillars of the brown-tail moths, the angle worms and insects with which I had fed him. The first thing the Jay did was to jump upon his back and give him a sharp peck, by doing which he learned that toads are not beings to be trifled with. He received a mouthful of such an acrid fluid that for almost an hour afterward he was coughing and endeavoring to spit it out. He never beheld a toad afterwards without fleeing from it in terror.

J-J was as neat about his person as a cat and spent a great deal of time drawing his feathers through his beak to remove any dirt which may be clinging to them. After each meal, indeed after every mouthful or two, he cleaned his beak by wiping it on his wooden napkin, a twig or chair back.

Living in a somewhat musical atmosphere had sufficient influence upon J-J not only to make him a singer, but an exquisitely sweet one. It is my custom to practice singing for a half hour every morning. Now our pet had never been allowed access to the parlor, but one morning as I was playing a prelude, he appeared at the doorway and peering curiously about, cautiously ventured a hop or two over the

threshold. Not meeting with any opposition he skipped boldly in and perched on the lower round of a rocking chair. He seemed to be listening with fixed attention. This performance was repeated for several mornings, until all at once he essayed a bit of song himself. His maiden efforts were so ludicrous that I could but pause to laugh, when he immediately stopped and nothing would induce him to begin again, though later in the day I heard him trying to imitate sounds made by neighboring chickens. Every day he practiced with me, and if he felt quite jubilant, he would warble or whistle when he thought himself unobserved. He had his favorites among songs,—James Hogg's "Skylark," a song in which the Lark's notes are imitated, "Come Let Us Sing" (from Mendelssohn's 95th Psalm,) Rubinstein's "Voices of the Woods," "Bonnie Laddie." Patriotic songs filled him with inspiration. He was a thorough believer in the union of the blue and the gray, "Dixie" being no less exhilarating to him than the "Star Spangled Banner," the Cuban National Hymn, or "Marching Through Georgia." He always listened to a new piece before attempting to join in. Now, two months after his adoption he sings most exquisitely, not any of the tunes that he hears, but little ones that he improvises.

J-J is a creature of moods. Nothing will induce him to sing unless the spirit moves. His musical fancies are most curious. Sometimes in the midst of a soft, low, whistling song he will break into a wild, harsh cry which does not seem in the least to mar the effect in him, though to us it is as if an angel melody became suddenly a brigand scream. What change of mood accounts for it we can never conceive. Nothing external occurs to explain the transition. If he notices anyone watching him he immediately hushes his song, but if one can peep at him unobserved he will be hugely entertained by the airs and graces which are equal to those of the most popular prima donna before the footlights.

He often converses with me, using now the low *eck eck* sound, and when he does not wish to jump upon my hand and be transported to some different place, a little protesting noise which says as plainly as words "No, no—I won't, I won't." If I give him a choice tidbit such as a daddy-long-leggs or a fat cricket, he never fails to express his satisfaction and thanks in a form of speech which he reserves for that purpose. If he is out of sight and I call, he answers with a soft "jay" (here am I.)

He is inspired to express his feelings in song by many different sounds—running water, the wind in the trees, a thunder storm, the humming of the sewing machine, upon which he delights to sit when it is in use. In his intervals of song he amuses himself by trying his

hardest to pull out a large, nickel-plated screw which moves up and down with every revolution of the wheel.

J-J loves his playthings as well as any of the children do theirs,—some little bells fastened to the window curtain, which he rings, a tiny brass Indian and a black-headed pin with which he juggles.

His back and head at first gray, are now dusted with a glimmer of blue—faint, elusive, like sunlight on rippling water or the bloom on the plum.

He is withall a most whole-souled little fellow, entering into every vicissitude of life with ardent enthusiasm, full of affection, loyalty and good will. His nature is optimistic, his temperament joyous and even though he does live in semi-captivity he is fully as happy as his brethren of the wild wood.

BIRDS OF A VILLAGE.

Nestling in the heart of a picturesque valley and surrounded for several miles in all directions by beautiful rolling country, lies the pretty village of West Grove, Pennsylvania. It is located in the south eastern portion of Chester county, and was for many years my home and hunting ground.

There was considerable woodland in the locality, also a number of varieties of coniferous trees, and the latter proved a great attraction for the birds, especially those appearing in the autumn and early winter.

The following table shows the different species of birds personally observed either in the village proper or within a radius of two miles from it.

Crow	House Wren
Blue Jay	Winter Wren
Robin	Kingbird
Blackbird	Pewee
Red-wing Blackbird	Wood Pewee
Bluebird	Crested Flycatcher
Brown Thrasher	Least Flycatcher
Wood Thrush	Gold Finch
Catbird	Scarlet Tanager
Oven Bird	Red-eye Vireo
Cow Bird	Yellow-throated Vireo
Baltimore Oriole	Green Heron
Orchard Oriole	Belted Kingfisher

American Redstart	Killdeer
Barn Swallow	Meadow Lark
Bank Swallow	Spotted Sandpiper
Chimney Swift	Mourning Dove
Purple Martin	Maryland Yellow-throat
Chickadee	Indigo Bird
White-breasted Nuthatch	Night Hawk
Flicker	Sparrow Hawk
Downy Woodpecker	Marsh Hawk
Bob White—Quail	Red-headed Woodpecker
Cardinal Grosbeak	Screech Owl
Chipping Sparrow	Ruby-throated Hummer
Song Sparrow	Golden-Crown Kinglet
Field Sparrow	Towhee (Chewink)
Fox Sparrow	Turkey Vulture
White-throated Sparrow	Yellow-billed Cuckoo
Snow Bird (Junco)	Yellow-breasted Chat
Cedar Waxwing	Brown Creeper
Purple Finch	Yellow Warbler
Carolina Wren	Great-horned Owl

In the above list no attempt is made at grouping according to season, but the names are given as observed during the course of the year. A large number of the birds named were regular breeders in that section. In addition to the above, Wild Geese were frequently observed on their migratory trips, but as a rule they traveled at a great elevation. However, we could distinguish their "honk" "honk," and see the "V" shape of their line. Cranes were also observed at different times, and on one occasion an adult Bald Eagle was shot in a woods about three miles distant.

Summing up we have a total of seventy (70) varieties of birds, which is a good representation for the small district canvassed, and doubtless there were others which escaped my notice.





Address communications for this department to
 MEG MERRYTHOUGHT, 156 Waterville Street,
 Waterbury, Ct.

MY DEAR YOUNG FOLKS:

Please observe carefully the heading above. *All* communications for this department are to be sent to the address given. A number of the letters for this corner have been sent to Worcester, one was sent to Belmont, Mass., and another to Waterville, Ct. The Roll of Honor this month includes only those who sent answers to the August puzzles, *exclusive* of the letter puzzle, as to print the names of the *one hundred and twenty-nine* who sent replies would crowd out too much else. You can see too, why we could not send personal replies as some of you requested. One reader sent in a list of forty-eight birds, several others also increased their lists by the names of birds never before heard of, or not found according to the conditions given. There were seven who would have been entitled to a game had their answers been received earlier. One boy found in the puzzle "some suet for all the birds to eat." Another boy asks whether the English Sparrow is included for protection by the Audobon Society. Although I agree with Dr. VanDyke that the English Sparrow is a "little beast" and should not be included in the kingdom of ornithology, it would not be exactly safe to leave them out, would it? As there are many other valuable sparrows and sparrow-like birds, which would be apt to suffer from careless boys.

Girls, remember that the pledge holds until you are eighteen, and a member will not wish to be seen with her hat ornamented with the feathers of dead birds.

We have received the following names of those who desire to take the children's pledge of the society.

Harold J. Hinson, Lithbridge, Canada, Marietta Washburn, Goodwin, S. D., Harold I. Orne, Melrose H'ld Mass., Minnie Camp, Knoxville, Tenn.

We would echo the words of one of our reader, "Yours for Bird Protection, now and all the time."

Cordially your Friend,
 MEG MERRYTHOUGHT.

BIRD-BUFF.

A NEW GAME.

Seat the company, (with one exception) in a circle and give each a number. One person blindfolded and standing in the center is called the Falcon.

He calls out two numbers, the persons having these numbers must at once rise and change places with each other without going outside of the circle. If either is touched by the Falcon before he gains his seat, he must imitate the song or call of some bird. The first person identified by his song takes the place of the blindfolded Falcon in the center, and again calls out two other numbers. If the game lags at any time the Falcon may call out the name of any bird, when everyone must change seats, at the same time imitating the song of the bird whose name is called. The Falcon will then be pretty certain to secure a bird to take his place as catcher.

If desired, forfeits may be required of anyone who repeats the song of a bird which has already been given.

WINNERS OF BIRD GAMES FOR AUGUST LETTER PUZZLE.

1, Isidor Rehfus, Wis.; 2, Gardner B. Weeks, New York; 3, Barbara H. Missley, Penn.; 4, W. P. Agee, Jr., Arkansas; 5, Leroy B. Noble, Ct.; 6, Scott Merritt, Iowa; 7, Miriam Inglis, Iowa; 8, Wm. J. McKenzie, W. Ontario; 9, Huldah Chace Smith, R. I.; 10, Margaret Jennison, Mich.; 11, A. L. Marshall, Nebraska; 12, H. T. Hardy, M. D., Ill.; 13, M. A. Mitchell, Washington; 14, Marjory Lester, Kan.; 15, Elma Brantingham, Ohio; 16, Fanny M. Chapman, Me.; 17, Marjory L. McIntire, Me.; 18, G. L. Harrington, Minnesota; 19, George Boyer, Mo.; 20, Mrs. George L. Mason, Vt.; 21, Robert H. Mans, Del.; 22, Bonnell H. Stone, Ga.; 23, Erwin H. Forbush, Mass.; 24, Alvah B. Stuart, Mass.; 25, Horatio N. Tragitt, So. Dakota; 26, Arthur D. Fuller, N. H.; 27, M. L. Delatush, New Jersey; 28, Wm. F. Klett, W. Va.; 29, Minnie Camp, Tenn.; 30, Naomi E. Voris, Ind.; 31, C. W. Wilson, Ky.; 32, Bonner Coffey, Tex.; 33, Albert Gersdorff, D. C.; 34, Ernest Seeman, North Carolina; 35, Lester D. Summerfield, Nev.; 36, H. Dinwiddie Martin, Va.

ANSWERS TO SEPTEMBER PUZZLES.**PI.**

- | | |
|--------------|------------|
| 1. Telegalla | 7. Leaves |
| 2. Turkey | 8. Buried |
| 3. Telegalla | 9. Hatched |
| 4. Flocks | 10. Heat |
| 5. Nests | 11. Sun |
| 6. Earth | 12. Earth |
| 13. Bushel | |

WHAT IS MY NAME?

Tailor Bird.

CHARACTERISTIC INITIALS.

- | | |
|--------------------|------------------|
| 1. Bald Eagle | 4. Fish Crow |
| 2. Purple Finch | 5. Screech Owl |
| 3. Indigo Bunting | 6. Cedar Waxwing |
| 7. English Sparrow | |

HIDDEN BIRDS.

Robin, Bob White, Heron, Owl, Wren.

ENIGMA.

Great Crested Flycatcher.

ROLL OF HONOR.

1. Marietta Washburn, Goodwin, S. Dakota; 2, Geoffrey J. Giles, Comfort, Texas; 3. Charles D. Robinson, Winslow, Me.; 4, Barbara Missley, Landisville, Pa.; 5, McCormick Jewett, Traverse, City, Mich.; 6, Louise Jordan, Defiance, Ohio; 7, Ida Agnes Veronica Conway, Upper Troy, N. Y.; 8, William Schneider, LaCrosse, Wis.; 9, Naomi E. Voris, Crawfordsville, Ind.; 10, Chas. H. Rogers, Crosswicks, N. J.; 11, Anna Kocher, Walberts, Pa.; 12, Sally W. Orvis, Manchester, Vt.; 13, G. L. Harrington, Langdon, Minn.; 14, Paul Ravelin, LePorte City, Ia.; 15, O. S. Briggs, San Jose, Ill.; 16, Robert Wilson, Wooster, Ohio; 17, R. B. Crispill, Kingston, N. Y.; 18, Huldah Chace Smith, Providence, R. I.; 19, Chas. Abbott, Antrim, N. H.; 20, Raymond Hill, Uxbridge, Mass.; 21, Clayton White, Leadbury, Ontario; 22, Marjory Lester, Kinsley, Kansas; 23, Stafford Francis, Exeter, N. H.; 24, Samuel D. Robbins, Belmont, Mass.; 25, A. L. Marshall, Weeping Water, Neb.; 26, Isidor Rehfus, LaCrosse, Wis.; 27, Eleanor Pope, Racine, Wis.

 EXTRACTS FROM OUR MAIL BAG.

I found the nest of a bird built on the ground in a clover field. The eggs were white with dark red spots thickest on the larger end. The bird was very brave, remaining on her nest until I put my hand within about one foot of her. She was lighter colored than an English Sparrow and had yellow streaks over her eyes. The nest was small, made of fine grasses and sunken into the ground. I also found a Marsh Wren's nest in a swamp. It had no visible opening in it, and was bound to the swamp grass.

PAUL C. RAVLIN, LaPorte City, Ia.

My best August hunt was made yesterday, (Aug. 3d) 44 species in eight hours and fifty minutes. My whole summer's list from this locality is seventy-one, including Mourning Warbler, Black Duck and Summer Yellowlegs.

CHARLES H. ROGERS, Crosswicks, N. J.

We all prize our Bird Magazine very highly. This is our second year, and we cannot get along without American Ornithology.

A. L. MARSHALL.

As a magazine it is the best of its kind. I take Bird-Lore, The Condor, Bird & Nature, and one or two others. But of them all I think there is no match for the Bird Magazine.

BROMELL H. STONE, Oxford, Pa.

We have fifteen nests of Barn Swallows in our buildings, so there are swallows skimming through the air catching insects almost incessantly during the day.

MARIETTA WASHBURN, Goodwin, S. D.

In 1902 and in May, 1903, I found nests of the Bluebird containing pure white eggs.

CLAYTON WHITE, Leadbury, Ont.

I have found nests of 33 different kinds of birds this year. I was in the woods the other day and all of a sudden a large brownish form melted into a nearby tree. I followed and found it to be a Barred Owl. It was a large bird, about twenty inches long, and had *no* ear-tufts. This last distinguished it from all other owls, most unmistakably, together with its superior size to most of them. The same day I saw a Yellowlegs on a small inland pond.

LEWIS STILES GANNETT, Bennington Center, Vt.

One of my friends has a big barn and in it are over forty swallows' nests. Before the rainy weather they were flying all around the barn but near the end of the month of rainy weather there were hardly a dozen left. I went up in the top of the barn and found up there on the floor five or six old swallows and lots of young ones lying dead. In almost every nest there were either rotten eggs or dead young ones. The floor was covered with dead swallows. In a bird house on the side of the barn were four dead white bellied swallows.

STAFFORD FRANCIS, Exeter, N. H.

In the letter I wrote you before I told you about a pair of Blue Grosbeaks that nested here last year. They came back this year, but they had to build four nests before they could raise any young ones, for the Blue Jays destroyed their eggs every time. We drove the Blue Jays away and now the Grosbeaks have raised two litters of young ones. All together the Grosbeaks have built five nests this year. There is a pair of Yellow Warblers around here this year.

MARJORY LESTER, Kinsley, Kan.

THE HUMMING BIRD.

Every summer a pair of Humming Birds come and spend the most pleasant part of the season in our grove. He hovers over the blooming flowers and sticks that long slender bill in, sucking up the sweetness of the blossoms. They often alight on the boughs and dress their glossy feathers with their long bills in a very dainty manner.

One summer a pair nested in our grove, and in vain I searched for the tiny home. One day toward the last of the summer, I found one of the young Hummers trying hard to hide from a cat who was determined to catch it for its evening meal. The poor little frightened bird lit on a neighboring rose bush and allowed me to come so near as to stroke his glossy back. But when I made a movement to pick him up he flew away.

A few days afterwards, on a wet, rainy day when in the garden, I heard a faint sound near me. Stooping down I saw the wet form of a Humming Bird. As I placed him in my hand he struggled as if in pain. His feathers were dry in a short time after he was placed by the stove. I put him in a cage and fed him honey from Four O'clock blossoms. He sucked it up and flew about the cage as though he was as well as ever. About an hour afterward a little rustle was heard and the lifeless body was found on the bottom of the cage.

MARIETTA WASHBURN, Goodwin, S. D.

(I think the Humming Bird has never been known to live in captivity.)

ENIGMA.

My 1st is in jump but not in run,
 My 2nd in hump and also in hum,
 My 3d and 4th you'll find in hold,
 My 5th you'll find in the word abode,
 My 6th is in coffe and also in tea,
 I am a small bird called a 1-2-3-4-5-6.

GEOFFREY J. GILES, Comfort, Texas.

SUGGESTED BIRDS.

What birds are suggested by—

1. Where bread is baked.
2. A girl's name.
3. A foolish person.
4. A colored bird.
5. A royal fisherman.
6. An old Indian Woman.
7. An expedition for fun.
8. Part of a fence.

LEWIS STILES GANNETT, Burlington Center, Vt.

A Million Every Month.

By manufacturing and selling a million records every month the Columbia Phonograph Co., has achieved the end for which it has long been striving—the reduction in the price of its High Speed Moulded Cylinder Wax records from fifty cents, each, to twenty-five cents. Simultaneously with this reduction in price a new record, greatly superior to any that has ever been offered for sale is being furnished—a black, super-hardened record, both durable and brilliant and combining sweetness and smoothness with remarkable volume. These records will fit all talking machines using cylindrical records and the facilities for manufacturing them have been increased to an extent that will enable the Columbia Phonograph Co., to produce a practically limitless supply.

While improved processes of manufacture and the simplifying of talking machine construction have resulted in the price of Graphophones being reduced, from time to time, until they are now sold at figures that bring them within the reach of all, the price of cylinder records has, in the meantime, remained at fifty cents each. For many insuperable reasons it has never been possible until now to sell records at the popular price that has finally been fixed for them. But continued and unceasing improvement in Columbia facilities has, at last, brought the output to a point where it is possible to cut the price in half, while instead of impairing the quality of the product to secure this end, a better article is to be furnished than ever before. This could only be done by increasing the sales to the enormous figures they have now reached and which are certain to assume bewildering proportions, with the reduction in the price.

The Columbia Phonograph Co., the pioneer and leader in the talking machine art, was the first to furnish a really meritorious record for fifty cents and while its records are far superior to those of previous years, the fact is admitted, on all sides, that Columbia records in all stages of their development, have always been the best that were made. And this is truer now than ever before. While the superiority of Columbia records would justify their sale at a higher price than that of any competing record, their reduced price means that the purchaser is to have the very best records ever manufactured and to have two of them at the price he formerly paid for one.

Preparations have been made with the utmost thoroughness to meet the emergency which a reduction in the price of cylindrical records to twenty-five cents, each, was certain to precipitate. In anticipation of an unprecedented demand for the new and vastly improved records, the factory of the Columbia Phonograph Co. is running day and night and every possible arrangement has been made to fill all orders with reasonable promptness, however heavy those orders may become.

To make better goods than its competitors and sell them at popular prices has always been the aim of the Columbia Phonograph Co. Desirous that the public should test its claims as to the superior quality of this new product it offers for a limited period to give a record free to any user of a talking machine who will call at any one of its stores and mention the type of the machine he is using. If not convenient to call, a record will be mailed, on receipt of ten cents to cover postage, and the information as to the type of machine in use.

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| 6 Ruffed Grouse on Nest. | 31 Five Young Chickadees. |
| 7 Nest and Eggs of Ruffed Grouse. | 32 Chickadee at Nest in Bird House. |
| 8 House Wren (male). | 33 Chickadee at Nest in Tree. |
| 9 House Wren (female). | 34 Brown Thrasher. |
| 10 Cedar Waxwings Feeding Young. | 35 Brown Thrasher on Nest. |
| 11 Cedar Waxwing on Nest. | 36 Wood Thrush on Nest. |
| 12 American Redstart (male) Feeding Young. | 37 Young Wood Thrush. |
| 13 American Redstart (female) and Nest. | 38 Pigeon Hawk. |
| 14 Prairie Warbler (male) Feeding Young. | 39 Bluebird at Nest Hole. |
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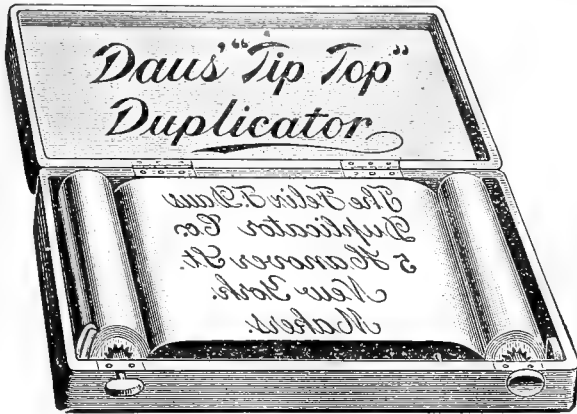
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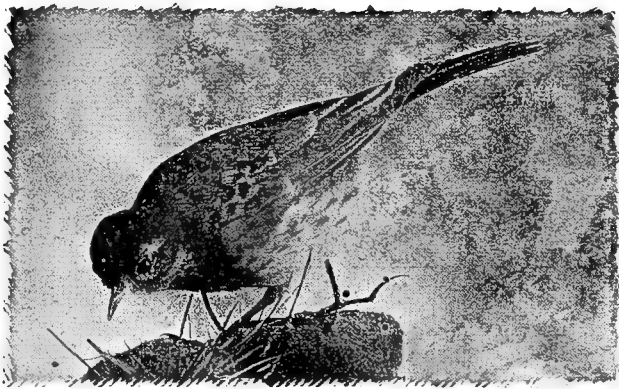
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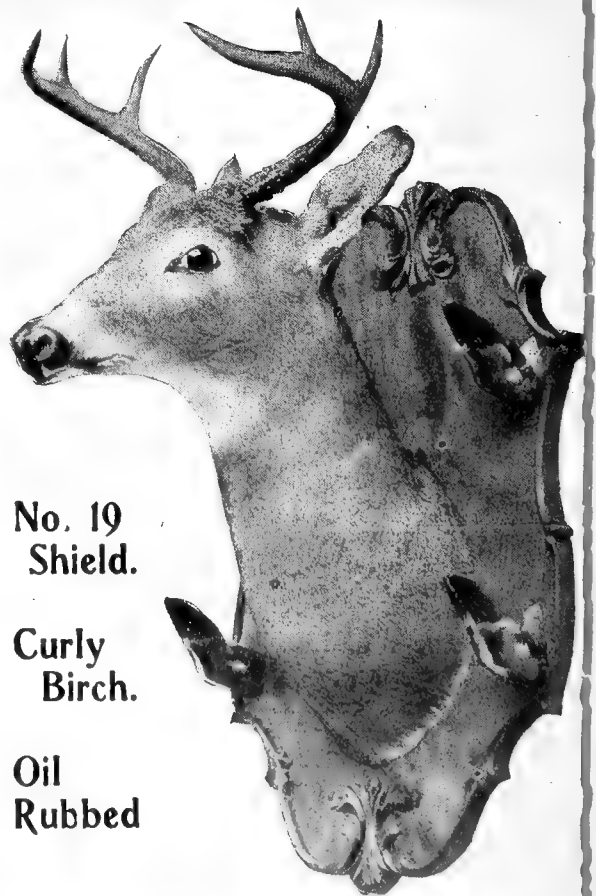
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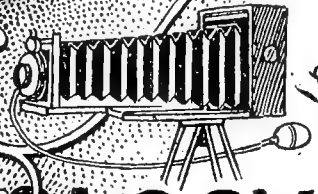


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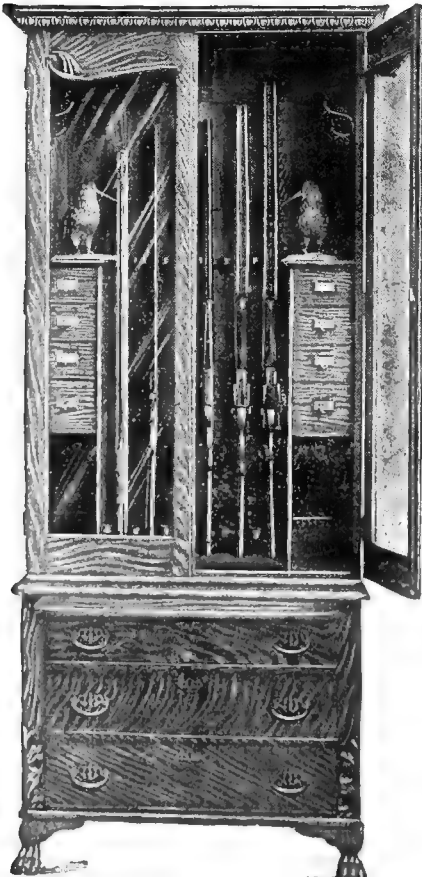
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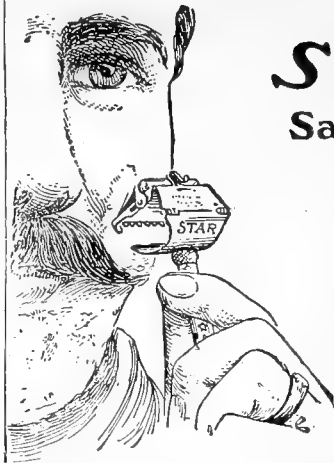
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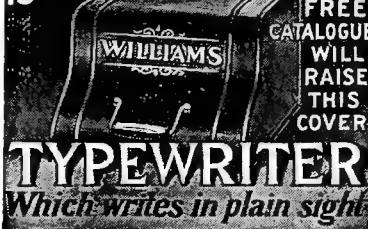
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VOL. III

NOVEMBER, 1903.

NO. 11

Our photograph contest, which ended October 1st, brought with it several pleasant surprises. The general average excellence of the prints far surpassed those sent in our last competition; and the whole number of photographs received in all three classes was a few over a thousand. The improvement shown in the work of a large number who contributed photos in the contest last year, is very marked and most gratifying, as is also the large increase in the number of pictures showing adult birds. This large number of photos represents a great amount of work and patience, but undoubtedly the makers of them have become far more intimate with bird life than they could in any other way. Judging them was also a difficult matter; we have considered them both photographically and ornithologically and make the following awards:

Class 1.—Live adult birds: 1st, "Kingfisher with Fish," by R. H. Beebe, Arcade, N. Y.; 2nd, "House Wren with Spider," by Geo. C. Embury, Bradford, Pa.; 3rd, "Bluebird at Nest," by J. H. Miller, Lowville, N. Y.

Class 2.—Young birds: 1st, "Young Chickadees being fed by the Adult," by Lispenard S. Horton, Hyde Park, N. Y.; 2nd, "Young Kingfishers," by J. H. Miller, Lowville, N. Y.; 3rd, "Young Shrikes," by R. H. Beebe, Arcade, N. Y.

Class 3.—Nests and Eggs: 1st, "Nest and Eggs of Cooper's Hawk," by G. L. Fordyce, Youngstown, Ohio; 2nd, "Nest and Eggs of Bank Swallow," by F. R. Miller, Toledo, Ohio; 3rd, "Nest and Eggs of Canada Goose," by P. B. Peabody.

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(GAMBEL SPARROW.)

Hush, my heart and let me listen;
Where dewy boughs in moonlight glisten,
Sways and swings in happy dreaming
Though waking oft, exultant seeming,
For the sake of his love in the green fir tree,
The little gray bird in the still night sings,
"Sweet, sweet won't you listen to me?
Sweet, sweet, so rich are we."

"Sweet, sweet, won't you listen to me?"
A nest so low in the green fir tree,
A little gray bird in the nest beneath,
All circled round with a honeysuckle wreath;
O hush! be still my beating heart,
The little gray bird takes up his part,
"Sweet, sweet, so rich my dearie,
So rich my dear and nothing fear we."

The night goes on and the moon sinks low,
The sky in the east begins to glow,
The boughs in the breeze move to and fro,
A little gray bird in joy now sings
"Sweet, sweet, the night was eerie,
Sweet, sweet, awake my dearie."
And all day long he sways and swings
The zephyr again the question brings,
"Sweet, sweet won't you listen to me?
Sweet, sweet, so rich are we."

E. INEZ DENNY, Seattle, Wash.

THE NUTTALL WHITE-CROWNED SPARROW.

BY WM. ROGERS LORD.

Every locality on our continent has its own special birds, sufficiently numerous to be called common, whose songs are of especially fine quality. There are everywhere generally recognized "the two or three best" singers. For a considerable extent of longitude and latitude in New England and the Middle Atlantic States, we have, for example, the Song Sparrow and the Wood Thrush. Further north, the White-throated Sparrow and the Hermit Thrush.

On the Pacific Coast, in western Oregon, through the Puget Sound region in Washington and into British Columbia, there are two birds which are in every field or upon every bush, inviting the attention of even the dullest ear to their marvelously rich and altogether fine singing. These are the Western Meadowlark and Nuttall (till lately, when renamed, the Gambel) White-crowned Sparrow. Let me introduce the readers of *American Ornithology* to the latter, a subspecies of our Eastern White-crowned Sparrow. This bird passes the winter in California but appears in the Willamette Valley, Oregon, about April 1st. It is not only very abundant but also fond of civilization and a never wearying and always beautiful singer. Wherever you go about the vacant lots of a city, even one as large as Portland, the fascinating song of this little creature greets you. There is a tender plaintive quality in the bird's voice that adds to its charm, a timbre not unlike that of the White-throated Sparrow of the east, and some would say the song is quite as fascinating, while all would agree it is very little less so.

The bird further draws every bird-lover to him, when out of the darkness of the night, comes sometimes as often as once an hour, his loving and lovely song. If there is woodbine or honeysuckle about the porch or piazza, it is not unlikely the nest may be placed there. One can imagine what delight is in store for the human family behind the windows, if ears and eyes and hearts have been opened at all birdward. There is a further fascination about the bird in the matter of song, since he is a tireless singer, defiant of storm and hot sun. From morn till eve, and at times from eve till morn, as I have stated, he utters his sweet invitation to hear him. At midday when the sun is burning, most birds are silent, retiring to shade or brook, but this little fellow sits upon bush or low tree and repeats his melody a hundred times.

The form of the song varies in widely separated localities. Within limited ranges, the song is very nearly uniform. About Portland, Oregon, the common song has been translated by a sensitive listener into "Sweet, sweet, listen to me won't you?" But around Puget Sound,



GAMBEL WHITE-CROWNED SPARROW.

in the vicinity of Seattle and Tacoma, the song is of different form and perhaps of a slightly different quality. The appearance of the bird, both in form and color, is exquisite. The form is symmetrical throughout, the body rounding with a perfect head and dainty, finely and beautiful yellowish bill. The crown, with alternating black, or dark, and and white stripes, furnishes a striking and lovely feature. The breast is gray with a tint of brown in it. The back has a rich variety of smoky or olive-brown with sepia-brown or black markings. Taken all in all, one would have to travel far to find a more enticing bird. Imagine our White-throated Sparrow all about in our New England towns, nesting in our vines and hedges and singing day and night. Those who know the latter can appreciate the happiness of the bird-lovers of the Pacific Coast in the ministry of the Nuttall White-crowned Sparrow.

There is another subspecies of the White-crowned Sparrow whose summer habitat is further north, beginning perhaps in northern Washington and extending to Alaska. This bird is known in the latest ornithological nomenclature as Gambel (formerly the Intermediate) White-crowned Sparrow. His appearance is so like the Nuttall, that no one but an expert can tell the difference, and then the bird would probably have to be in the hand. But not only is his home widely separated in the main, but there is the absence of a mark, besides the lighter general color, which distinguishes him from his relative further south. In the Nuttall Sparrow the pale yellow on the edge of either wing, while the edge of Gambel is ashy. The song too is different and yet not so different but that, were it only a matter of song, the birds might be classed together.

THE NORTHERN NIGHTINGALE

or Gambel Sparrow is quite numerous on the shores of Puget Sound. As a pioneer child in the early days, 50's and 60's I listened with delight to its song, especially when I heard it at night. On account of this habit of waking and producing its sweet notes at intervals, throughout the night, it has been aptly called the "Northern Nightingale." Some have called it the "Sweet-Eva-Bird" as they fancied its song resembled the words "Sweet, sweeter Eva." Others translate it "Sweet, sweet, won't you listen to me?" To my ear it is quite plainly spoken by a majority of the birds "Sweet, sweet, so rich (or witch) are we" Either some are not as proficient as others or the song is varied, sometimes cut short at "are." In the borders of, or in the openings in the great forest, it builds its nest a few feet from the ground, often in a young evergreen tree, likely the Douglas fir, the boughs of which may be twined with sprays of the orange-scarlet honeysuckle. The father bird sits on the top central twig and sings devotedly day and night. Frequently I have seen them about dwellings, perched on a porch railing or neighboring shrub, singing as fearlessly as in a great forest.



GAMBEL WHITE-CROWNED SPARROW.

A BIRD CENSUS.

The taking of a "Bird Census" of any considerable territory of our country would furnish a sound basis for future calculation on the increase or decrease of certain species. Why have not more of our bird observers taken up something at once so interesting and beneficial?

First of all, the benefit to observer or "census-taker:" The amount of this unwittingly accomplished cannot be overestimated. The work necessitates a constantly alert eye, an eye ready for the slightest motion close at hand or on a distant hillside; a constantly alert ear, ready to catch the slightest but distinctive chirp nearby, or a distant song; a constantly alert mind that will supplement the eye and ear by naming readily the bird seen or heard, and will remember where certain birds have flown to avoid a second counting. All these things necessarily develop the senses and mind thus exercised. "But, there is a great deal of work connected with all this, is there not?" No, the nearest approach to work is pleasurable routine and there is very little of that.

Here is my method of recording a day's outing: For the field I use a 4x6 memorandum book. In abbreviation I enter at the left of a page a list of the birds I expect to see (this is easily obtainable from former data of the same locality). With field glass hanging from my shoulder and pencil and paper in hand, I proceed to count. From yonder pasture come the plaintive notes of a Field Sparrow; opposite "F'd Sp." comes a 1. Three Towhees cross my path; 3 opposite Towhee. When more Field Sparrows are heard, the preceding figures are crossed out and new ones put down. When the bird is in song a small circle follows the name. The sex sign may be used for rare birds. When I want to record locality more definitely I use colored pencils; for instance, red *to* a certain farm house or bridge, and green *beyond*. This gives a double field for comparison. Notes of peculiar happenings in the bird world, or of nests, or wild flowers may be written on the other side of the page. On my return these notes are written in my Journal, and together with remarks on the weather, and anything else that will characterize the day and aid me to recall it.

Across the sheet the totals may be placed; the number of individuals for the month, and the number of times seen. At the foot of the page are two more totals; the number of individuals for the day and the number of species. The list of birds as made out at the end of the month may be in alphabetical or family order.

Now, if I have succeeded in showing some of the advantages of this method, let me contrast the old. In almost all lists of birds—from

local lists in pamphlet form to those in the most scientific publications,—general and almost meaningless terms prevail. “Abundant, common, not common, tolerably common, quite common,” these are in common use. How little they mean! (and how much they are supposed to mean.) But each person has his own standard and what “common” means to one person may mean “not common” to another. I can convey to no one any definite idea when I say “not common migrant.” How many more is “common than “not common?” “Tolerably common, quite common,” what are their opposites? To be good terms their opposites must be good. If lists would give some numbers, some real data, it might be possible to conceive of things. And what an unsystematic, unscientific spirit these loose words reveal!

May every sincere observer who reads this, remember that the world is changing and that “the kind I’ve always bought, therefore buy it again” won’t do.

NORMAN O. FOERSTER.

HOW A MOCKINGBIRD LEARNS A TUNE.

BY ANNA HEAD.

A nest-full of very young Mockingbirds were bought of an Indian boy on the wharf at San Diego; California, and brought home on the steamer in a cigar box. For some time they had to be fed by hand on flies, worms, and hard boiled egg, and in this way became extremely tame.

One of them proved to be a fine male and for eleven years was the delight of our household. He knew not only every member of the family by name, but greeted even certain favored guests in a special way. His chief expression of affection was a very soft whisper, hardly a chirp, uttered with half shut eyes and feathers ruffled up, while he humped his back and drew his head in between his shoulders. He showed his dislike of our maid whose broom was his great terror, by strutting up and down with his tail and wings spread like an angry Turkey cock, and scolding in a harsh, grating tone.

I wished to see if he could learn to sing a strain of human music in addition to his own wild melodies, which held us fascinated in the moonlight nights of spring. So I kept his cage beside me while at work and whistled over and over two lines of Bonny Doon, “Thou’ll break my heart, thou bonny bird, A warbling on the greenwood tree.” I thought the intervals in that strain had something of the “woodnote wild” and ought not to be hard for him. All day, and day after day I kept it up, and still Mockie showed no signs of interest. He kept unusually still, however, with his head often on one side and his eyes half

closed, and never interrupted me once with his hilarious outbursts, so I was encouraged to persevere.

After several weeks of this, I was one day called by the maid "Come quick," she said "the bird is singing your tune." I went with her to the door and peeped in. There sat Mockie on the back of a chair singing over to himself, but perfectly correct, the whole strain. He sang it very softly, and seemed shy about his accomplishment, for as soon as he saw he was observed he interrupted the sweet notes with an impatient "chack, chack." After a few days he gained confidence and sang out boldly and loud, even before an audience of strangers. But he was always prone to interrupt himself mischievously, at the very climax of the song, with some droll squawk, the imitation of a wheelbarrow, or other uncouth sound. This song he never forgot till his death, and taught it to his young birds, who, however, never equalled him in their performance of it. Another indication of his ear for music was that he usually kept silent while the piano was being played, and seemed to listen with interest, as he had done while he was learning the song. Sometimes he would sing a sort of accompaniment of soft, single notes, quite different from his usual song. These were in harmony with the piece played, and I was so much struck with this fact that I wrote them down on the score of a Beethoven Sonata. The notes were not continuous, but came in tentatively now and then, as a novice with the violin might try to strike a note in harmony from time to time. I believe if a simple composition had been played to him often enough, these notes would have assumed definite form, and the bird would have appeared with assurance in the role of a composer.

The fact that he still sang the song characteristic of the race, though taken so early from the nest, might be thought to have some bearing on the vexed question discussed by Lloyd Morgan in "Habit and Instinct" on whether song is an inherited instinct or learned by tradition, from the parents. But it should be remembered that night and day from the time he chipped the egg till the Indian kidnapped him, he had heard his father's song, which may have well made an indelible impression on so retentive a memory.

BLACK TERN.

A. O. U. No. 77.

(Hydrochelidon nigra surinamensis)

RANGE.

Found through the whole of temperate America from Alaska southward into South America.

DESCRIPTION.

Length, 9.5 in.; extent, 24 in.; tail, 3.7 in., forked for about one inch. Adults in summer:—Head, neck and under parts black; whole back, wings and tail lead gray; primaries are black, frosted with white; under tail coverts are white. Winter adult:—Forehead, sides of head, neck all around, and entire under parts white. Crown grayish, shading to darker off hind head and continuing as a bar through the eye; upper parts paler than in summer and the feathers with white edgings. Young:—Similar to the winter adult but the upper parts are brownish and the sides of breast and body are washed with gray.



NEST AND EGGS.

Black Terns breed chiefly in the interior in reedy marshes. The eggs are very commonly deposited on the little islands of decayed vegetation found floating in such localities. When built in the marsh grass a slight nest is built of the dead grass. The eggs are laid from the latter part of May to well into July, and frequently two broods are raised in a season. Three eggs comprise the full set. The ground color varies from greenish to brownish and they are heavily blotched with brown and fainter traces of lilac.

HABITS.

The pretty little Black Terns, which next to the Least Tern are the smallest that we have, are very common in the interior portions of the country. In April and May, upon the approach of the breeding season, they congregate in large flocks about the reedy sloughs of the West. Here they attend the duties of nesting, caring for the young, and instructing them in the arts of flying until the middle or latter part of October when the greater part of them have left for warmer localities in which to pass the winter. During migrations they fly chiefly at



BLACK TERNS.

Adult and Young.

night and at a great height. The day time is passed in rest or in feeding about the marshes that they pass on their way South. In the Fall and Spring they are a great deal more common along the coasts than during the breeding season. They are very strong fliers and are frequently met with in the middle of the ocean.

Except during migrations they do not usually fly at a great elevation. Their movements while on the wing are the equal of those of any others of the family, as is shown by their scientific name of *Hydrochelidon*, which signifies "Water Swallow". Their movements on the land are graceful although they do not do much walking, trusting to their wings rather than their feet in moving from place to place. Their head is carried well down on the shoulders and the body is horizontal with the wings well up on the back. They live chiefly on insects, worms and young fish and frogs, which they catch on land or by dipping their heads into the water, rarely swimming except from necessity.



NEST AND EGGS OF BLACK TERN.

Photo by P. B. PEABODY.

A SEPTEMBER CANOE TRIP.

VINCENT E. GORMAN.

September is an interesting month to bird-students. It is then that Nature's summer freshness is turning into the gold and scarlet splendor of autumn. The birds are stirring about after their long August rest, some are singing, and all are preparing for their southern journey. Having passed the moulting period, they are now dressed in brand-new suits.

Such was the condition of things in the out-door world when a friend and I arrived at the "lake" one afternoon early in the month. This lake was not a large body of water—perhaps half a mile long by an eighth wide—and was locally called "the lake" to distinguish it from smaller ones, known as "ponds". We were soon seated in my canvas canoe and paddling up the lake.

Both of us were enthusiasts in ornithology, and we now turned our attention chiefly to the birds. Along the lake-side were several telegraph-wires, literally loaded with swallows. At our approach they darted off, skimming close to the water with that airy, graceful flight common to members of this family, and this gave us a chance to identify them. The tree or white-breasted species was most common, and named in order of their abundance, we also saw the eave, barn and bank varieties, besides the so-called chimney "swallow".

Proceeding on, we heard the squawk of a heron, and looking up recognized the little green species, winging rapidly toward an alder thicket. Not long after, the green heron's larger relative, the American bittern, was observed. As it was the first I had seen this year, I took care to get a near view. It flew past with a rather slow and labored flight; it was brown on the back, had long legs and neck and a wide expanse of wing. A bird following the same profession as the two preceding now appeared in the person of a kingfisher. He was a handsome fellow with his blue back, ruddy under-parts and upright crest. After flying around several times, making two or three bullet-like plunges for sun-fish, he headed straight for the canoe, about a foot above the water, and coming like an arrow, he shot directly toward us. When he was about ten feet from us it looked as if something would happen, but just as he was about to collide, he swerved aside like a flash, giving his rattling alarm as he went. I have read of the extreme timidity of this bird, but this one was either singularly bold or else did not see where it was going.

My friend now suggested that we should paddle up the brook that filled the lake. Accordingly, we worked briskly for a few minutes and found ourselves at its mouth. Here the spotted turtles peeped curious-

ly at us from bunches of pond-scum, and many-colored dragon-flies poised on shimmering wings. The brook flowed in winding curves through the woods, and being unmolested by intruders, the birds and other forest creatures were quite abundant.

Now we were allowed sight of a bird rare in this locality—the Horned Grebe, or water-witch. In this instance it certainly earned its popular name, for it played us a neat trick. When we approached, it dove beneath the surface and swam for nearly a hundred yards before appearing. This was repeated until we gave up our attempts to get nearer.

Soon after this we heard a prolonged ciucking call and noticed a long-tailed, pigeon-like bird. A glance at the under side of its lengthy caudal appendage, revealing white spots, showed it to be a yellow-billed cuckoo. He was perched on a sapling, eating a small caterpillar, and so absorbed was he that the canoe glided quite close. I could have touched him with my paddle, and when disturbed he flew only a few yards. Much has been written about the cuckoo's shyness, but this one was without trepidation, and I have seen a number of others exhibiting the same characteristics.

Cedar-birds were plentiful—there were nearly as many as in May or June, when large flocks visit the head-waters of the lake. How soft and silky these waxy-winged beauties look, yet what a disappointment that they have no song.

Shallow water now warned us that futher progress would be perilous to the sides of our frail craft, so reversing our stroke we were soon at the boat-house, and our little canoe trip was at an end. We had a bicycle ride of four miles before us, however, and on the way home we saw the following birds: Flicker, Robin, Crow, Phoebe, Catbird, Song-sparrow, Bluebird, Sparrow and Marsh Hawks, and Least Flycatcher.

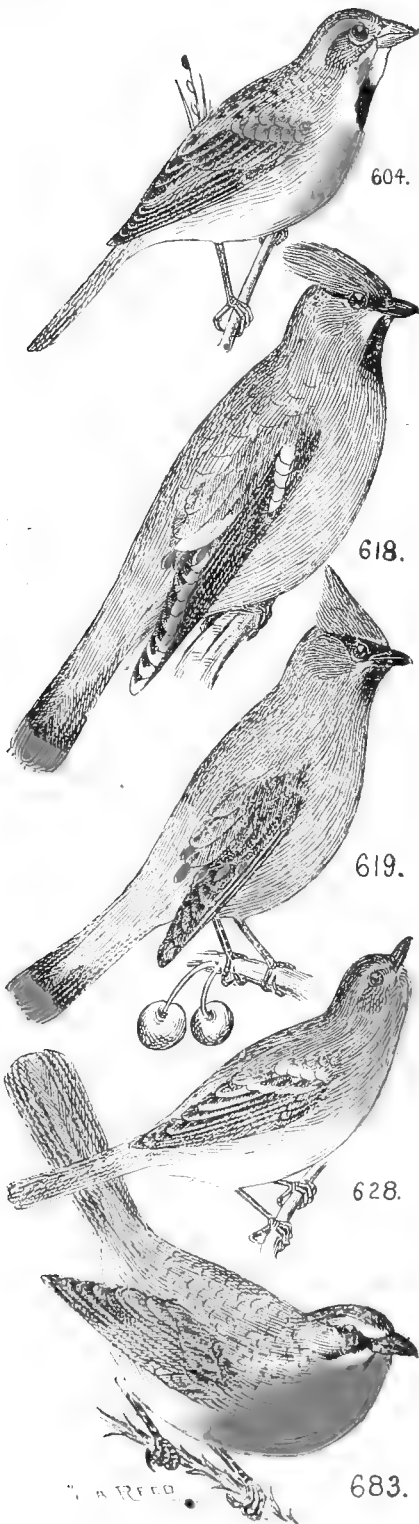
Though not an unusual number of birds had been seen, we had both enjoyed the afternoon, and had at least learned some interesting things about the September birds.

A RARE PET.

A druggist here who is very fond of pets, and has many kinds, has now added to his list a Ruffed Grouse, (*Tetrao umbellus*). The bird is a full grown female and was captured in a strange manner. It was seen by a boy to go under some small evergreens and brush, and as she did not go out as he approached the place, his curiosity led him to put his hand into the brush to see what had become of her, and as he did so she stepped into his hand. He carried her home and let her go in the barn. The next day as they were working around the barn, she went out through one of the doors which they had left open and flew down to the woods back of the house, and they thought they had lost her, but she was not gone more than two hours before she returned and entered the barn, then they closed the door and caught her and took her to this druggist who has had her nearly two months. She seems no wilder than a hen, and allows one to handle her as he would a pet bantam. This is the first time I ever saw a tame grouse, and I did not suppose they could be tamed. Has any reader of this magazine known of a similar case?

CALVIN C. MANLEY, Milton, Vt.

Identification Chart No. 22.



No. 604. Black Throated Bunting or Dickcissel, (*Spiza americana*).

The United States east of the Rocky Mountains and chiefly west of the Alleghanies. Rare in the southern parts of New England and New York. Length about 6.5 in. Male:—Above grayish brown with the middle of the back streaked with black. Throat and line extending on each side to the bill, black; middle of breast yellow; rest of under parts white; cheeks gray, separated from the crown by a white stripe; shoulders chestnut. Female similar, but paler and the throat patch lacking or spotted.

No. 618. Bohemian Waxwing, (*Ampelis garrulus*).

Whole of Canada and south in winter regularly to the northern tier of States; south to Colorado in the West and rarely to New York and Massachusetts in the East. Adults:—Length 7.5 in. General color a brownish ash shading into brighter brown on the crest and sides of head; a frontal line which extends through the eye, and the chin and throat velvety black, the sides of the latter bordered with white; under tail coverts chestnut; tail ash and shading to black towards the end which is broadly tipped with yellow; primaries tipped with yellow; secondaries and primary coverts tipped with white; Secondaries shafts tipped with horny, red, waxlike appendages.

No. 619. Cedar Waxwing, (*Ampelis cedrorum*).

Length 6.75 in. General color shading from a purplish chestnut on the fore part of body to clear ash on the rump, and through yellowish on the belly to white on the under tail coverts; black frontlet bordered with white on the forehead and chin edged with white on the sides. Wings plain but with the waxlike appendages as in the preceding species. Tail tipped with yellow.

No. 628 Yellow-throated Vireo, (*Vireo flavifrons*).

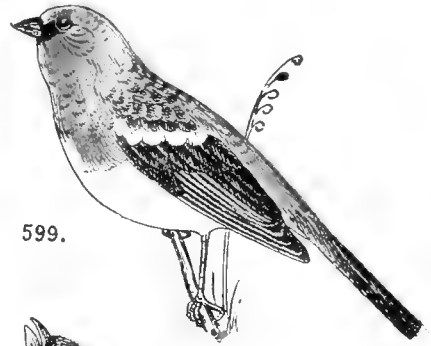
United States east of the Plains. Length about 9 in. Above bright olive green; below olive yellowish, shading into white on the belly. Ring about the eye and superciliary line, yellow; wings dusky, and crossed by two white bars.

No. 683. Yellow-breasted Chat, (*Icteria virens*).

United States east of the Plains. Length 7 in. Upper parts olive green; below bright yellow, changing abruptly to white on the belly superciliary stripe, spot on lower eyelid, and maxillary line white; lores black. 683a. Long tailed Chat (*I. v. longicauda*) Western variety. Back more grayish and tail longer.

No. 599. Lazuli Bunting, (*Passerina amoena*).

Western United States from the Plains to the Pacific. Length 5.5 in. Male:—Head and neck all around, and entire upper parts of rich azure blue, slightly obscured by blackish on the back. Under parts white except the breast adjoining the blue, which is brown; a broad white bar crosses the median coverts and sometimes a narrow one at the tips of the greater. Female:—Above yellowish brown, sometimes with faint bluish edges and crossed by two brownish white wing bars.



599.

No. 600. Varied Bunting, (*Passerina versicolor*).

From southern Texas southwards. Length 5.5 in. Male:—General color purplish, more red on hind head and blue on top of head and rump; lores black. Female like that of preceding except that it lacks the wing bars.



600.

No. 601. Painted Bunting, Nonpareil, (*Passerina ciris*).

Common in the South Atlantic and Gulf States. Length 5.5 in. Male:—Crown, hind neck, and sides of head bright blue; back yellowish green; rump and tail purplish red; under parts bright vermillion; wings dusky. Female:—Above yellowish green and below yellowish white. Orbital ring vermillion.



601.

No. 654. Black-throated Blue Warbler, (*Denroica coerulescens*).

North America east of the Plains. Breeds from northern United States northwards. Length about 5 in. Male:—Above dark slaty blue, lighter and brighter on the forehead; back with black streaks down center of feathers; throat, sides of head and breast black, this extending along the sides in a continuous band or broken streaks; wings and tail dusky, the former with a broad white patch at the base of the primaries and the latter with white spots on the inner webs of outer feathers near their ends. Under parts white. Female:—Olive brownish above and dull whitish below, but always to be recognized by the characteristic white blotch at base of primaries; this may be a mere speck but it is always present.



654.

No. 658. Cerulean Warbler, (*Dendroica coerulea*).

Eastern United States, rare in New England. Length 4.5 in. Male:—Upper parts sky blue, the middle of the back and also the crown with black markings; below white; streaked across the breast in the form of a ring with dusky blue; wings with two broad white bars and tail with white spots near the tips of outer feathers.



658

C. A. REED

A BIT FROM SPARROWLAND.

BY ALICE J. NICHOLS.

Our Jersey home had an unused room, the window blinds of which were always kept closed, but with the shutters open. Mr. and Mrs. Sparrow were perhaps students of social or household economics and did not believe in a room being utterly unused, or perhaps they specially admired the view from that window looking out upon the oaks and hickories and tangles of grasses and ferns, and the wild, sweet things which Nature seems to create for the mere pleasure of it. At all events we found them busily at work one early spring morning carrying straws for a nest and weaving them together inside our window blind. Later on by cautiously raising the window when the mother bird was absent, we could see into the nest, and counted four speckled white eggs. After a time we heard twitterings and peepings and knew that four tiny babies were cuddled up in their little straw home. Then we did not dare raise the window for fear of possibly harming one of the wee mites, and had to content ourselves with putting our faces close to the window, getting sometimes a side-ways glance at them. One day while the mother was away I was endeavoring to see them when Mrs. Sparrow suddenly returned and found the face of one of those great humans pressed close against the window by her babies. I have never seen a more frightened creature. She hopped up and down with fear, if one may speak of "hopping" in the air, and seemed to almost lose her senses at thought of the great peril she fancied her children to be in; then flew to the oak tree in front of the window where she could keep guard. I made haste to go away, sorry and ashamed for having caused pain to the mother-heart of even a sparrow.

I was away from home then for two months, when I returned I was told that my little sparrow family had long ago been taught to fly and had gone away, and now a second brood was just ready to leave the nest. Well, sparrow birds are much alike to casual observer, and it would doubtless be just as interesting to watch these as the first ones, so I sheltered myself in the swing under the trees with a book, but ready to note if anything interesting occurred. There was much flying and fluttering going on, the little ones venturing out as far as the limbs of the nearby oak tree, and then dashing back home again, evidently a bit fearful of the big world beyond. After a time I noticed that the father bird would drive away the little ones as fast as they came back to the nest, scolding in language which, while I was too ignorant of their speech to fully understand, had a fearful sound. Evidently he was saying. "Now young sparrows, you are grown up and it

is time you were out in the world. Your mother and I have fed you ever since you were born, and we've had to hustle to do it, too. Why we've hardly had time to breathe some days. Now you are as big and strong and fat as birds need be, and you must do your own hustling".

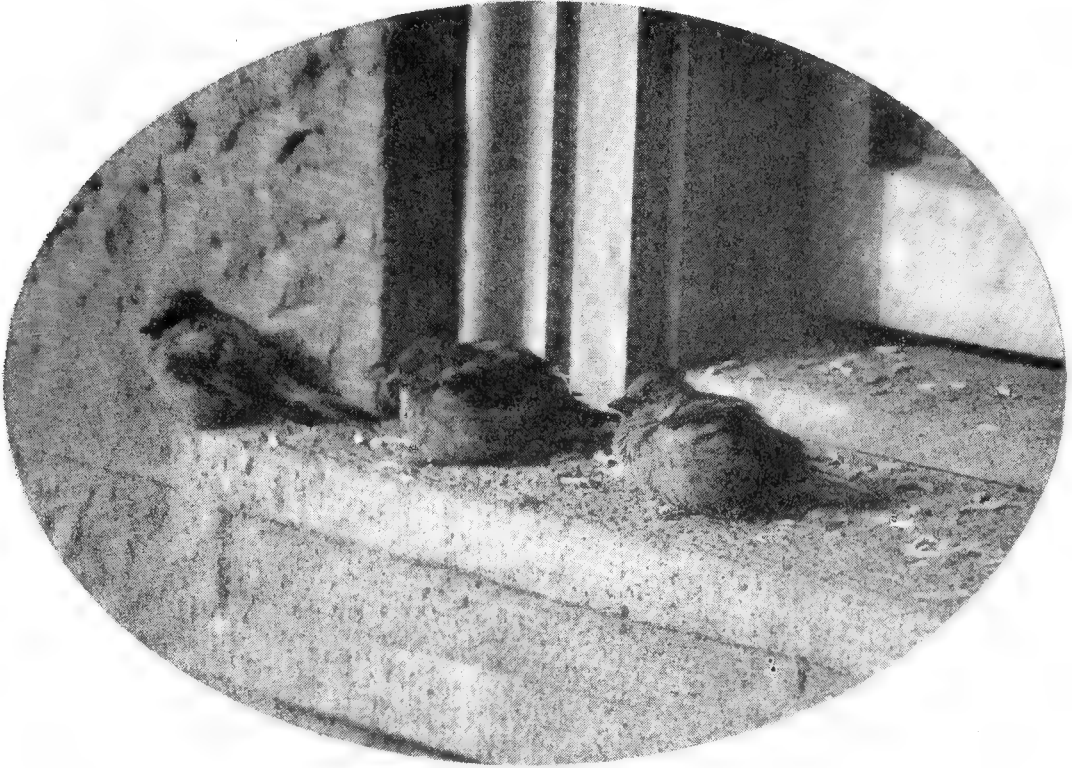


Photo from life by C. A. Smith.

ENGLISH SPARROWS.

Three of the birds seemed to take this plain language to heart and evidently thought best to obey, after a few mild protests, but one, perhaps the oldest, had a mind of his own. Again and again he flew back to the window shutters and was immediately chased away by his father who vociferated loudly his displeasure. Finally the young gentleman even ventured into the nest. This was a straw too much (no pun intended!) for his father's patience, and by the squawking which came from within one could imagine something unpleasant was happening. A second later both dashed wildly out, the younger in advance closely pursued by his irate parent. He flew down into the grass not far from where I was sitting, and his father following, proceeded to administer such a strong drubbing as I hope few disobedient children ever receive. I think that father sparrow must have been a Puritan of the old school, certainly none of them could have been sterner or stricter in rearing his children, or could have administered punishment

more severely. But it seemed to have the desired effect. Young sparrow betook himself to the woods and I am sure never ventured to put so much as his bill inside the old home again.

This last spring the same pair of sparrows, presumably, made their nest inside the same blinds, leaving the old nest deserted and making a fresh one at the opposite end of the window. The mother had been setting on the eggs for a week or ten days when the family suddenly had an unusual burden put upon them. It came about this way. Across the street a pair of sparrows had built a nest beneath the eaves of a house, and the boy who owned the family who rented the house, was amusing himself with his sling-shot when he accidentally shot a stone at the nest and down it came with three half-grown birds in it. The weetlings were uninjured, but what to do with them was a problem, for the eaves were out of reach of the longest ladder in the neighborhood and there was no possible way of getting the nest back. The boy, Charlie, ran in great excitement across the way to his friend Andrew, the boy who owned the family who lived in our house, to get the advice which one boy is sure to have for another. Andrew remembered the teacher at school telling them that even English sparrows would care for another bird's children if placed in their nest, and they immediately decided to try the experiment. They carefully brought the birdlings from across the way and carried them upstairs, and cautiously opening the window put them gently into the nest. The parent birds were away for a few moments, but when they came back two more astonished or frightened birds you never saw. They flew out quickly and stayed in the oak tree a long time, twittering and chirping in excitement, and no doubt consulting together what was best to be done, and trying to explain this strange phenomenon—a family of bird babies dropped into their nest without the preliminary of being hatched. Finally the mother left the tree, the father staying to keep watch that no other unheard of thing happened to disturb the peace of their home. In a few minutes she was back, bringing another female bird with her. Was it the mother of the little stranger, or an old maid aunt of the family who stood ready for emergencies? Not being on intimate enough terms with them to ask we could not tell, whoever she was she understood the necessities of the situation, and presently all three were hard at work trying to fill the apparently bottomless capacities of those little ones. Day after day the three cared for them till they were well grown and ready to fly, and then, when they had been properly taught that greatest of bird accomplishments, and had gone away to the woodland, the strange lady sparrow disappeared also.

Meanwhile the eggs in the nest had been kept warm and in proper condition, possibly by the young birds' constant presence, for a week or so after the stranger birdlings had been taught to fly they hatched out and Mr. and Mrs. Sparrow had another set of mouths to feed, and another brood to teach to fly and to be well mannered and obedient.

LITTLE BLUE HERON.

A. O. U. No. 200.

(Ardea coerula.)

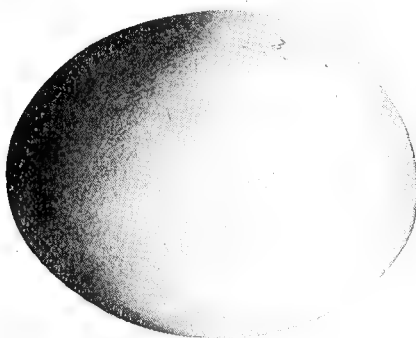
RANGE.

Southern portions of the United States; north casually to New England. Breeds abundantly along the Gulf Coast.

DESCRIPTION.

Length 24 in.; extent, 42 in.; tail 4 in. Adult (blue phase):—General color slaty blue, changing to purplish on the head and neck. Bill bluish; eye yellow; legs and feet black. White Phase:—Entire plumage white with the exception of the bluish primaries and sometimes traces of bluish elsewhere.

NEST AND EGGS.



Little Blue Herons breed in large communities in the swamps along the Gulf Coast. The nest is simply a frail platform of sticks through which the three or four pale bluish eggs may sometimes be plainly seen. The eggs are laid during May or June.

HABITS.

Little Blue Herons are one of the many fishermen of the South. In their general habits they are very similar to the Green Heron of the North, except that they nest in larger colonies than do the Green Herons in the North. In the isolated swamps along the Gulf they build their nests in the mangroves or willows in company with Louisiana Herons and the little Egrets or snowy Herons. Here if undisturbed, they sit quietly all day, basking in the sun, going fishing late in the afternoon and early in the morning. Their food consists almost entirely of small fish, varied occasionally with small frogs and insects. Fish they catch as do other herons by standing motionless in the water until the victim comes within reach when it is caught unerringly between their long mandibles. Like the Reddish Egret these birds have two color phases, in the white one of which they are very similar to young birds of the Snowy Heron and doubtless are often mistaken as such.



LITTLE BLUE HERON.

MY FEATHERED FRIENDS.

BY EMMA M. DOAK.

Some of my earliest recollections are of a pair of Chipping Sparrows that built their nest in our yard. We scattered crumbs for them until they became so tame they would eat from our hands, and carry crumbs to the nest to feed the little ones. How delighted we were! We were almost afraid to breathe for fear we would frighten them. After they became accustomed to eating from our hands we would open our fingers and let a tiny foot slip through and then gently close them around the slender little leg and "Chip" was a prisoner, but we never kept him long. He would pull to get loose and at the same time turn his little head to one side and look up at us as much as to say: "Did you know you were holding my foot? Please let me go for my babies are hungry." And he would fly away with food for the baby birds and quickly return for more.

For the last three winters I have greatly enjoyed feeding some of the birds that stay with us during the cold weather. I first fed a pair of White-breasted Nuthatches from a small box tacked to an apple tree near the window. They were very fond of pumpkin seeds which they would carry off and wedge into the rough bark of the tree and then, hanging head downward, peck out the kernel.

The next fall I thought I would get better acquainted with them, and tacked a box on the windowsill. They soon became so tame they would come to the box when we were just inside the window. They would come early in the morning and, if the box were empty, they would peck on the glass or cry: "*hank, hank, yank, yank,*" which was their way of asking for their breakfast.

Hoping to attract other birds I tied some beef bones to the branches of a tree near the window, and one day soon after was pleased to see several Crested Titmice on the tree. They were so shy they would fly away if anyone went near, but the next morning seeing the Nuthatches carrying nuts from the box they came too, and what a busy, happy time they had trying to see which could carry off the most. Before spring they would take nuts from our hands. They are also fond of sunflower seeds, fat meat, and sweet cake.



Several kinds of Woodpeckers also came to the tree and box; among them was a pair of Red-bellied Woodpeckers, the first of the kind I had ever seen.

In April the Titmice left for their home in the North and the others went to the woods to begin housekeeping, but when winter returned they all came back and seemed to feel as much at home as they did in the spring.

Beside my old friends there are three dear little Chickadees—the first I have seen for years—and occasionally a pair of Blue Jays.

Several of the common Blue-birds have been with us all winter but they do not come for food. I often wondered why they remained behind when the others went to the sunny South. But it was very pleasant to hear them singing when the mercury was near Zero, and to see them flitting about when the ground was white with snow. They frequently spent the night in an old Robin nest near the house.

During a week or two of very cold weather in February when everything was covered with snow and ice I scattered grass seeds on the snow near a window and they were appreciated and enjoyed by a flock of thirty or more Tree Sparrows and Juncos, and one day a beautiful Cardinal came. His bright red coat showed off to good advantage with the snow for a back-ground as he hopped about in his dignified way among the sober-colored Sparrows and Juncos.

I also enjoyed furnishing nest material for the birds in the spring-time. It is so interesting to watch them and see what they like best. The Purple Grackles and Robins would take all the cord and string they could get and, sometimes, other things. A handkerchief that was drying on the grass disappeared and was not found until the falling leaves revealed it. A Robin that had been building her nest in a grape-vine near by had evidently been pleased with it for she had carried it off and woven one corner into her nest. No doubt she thought she had the finest home in the neighborhood.

The Baltimore Orioles and Yellow Warblers would take only white material. One Warbler's nest was made almost entirely of strips of muslin. They would come for them when I was only a few feet away and would fly off with a foot or more of string streaming out behind them. The nest was a cute little rag-bag, but sad to say it was scarcely completed when it was destroyed by some cruel bird to adorn its own home, and the busy, happy little pair that had flitted about like tiny sunbeams at once left the vicinity, and let us hope they fared better elsewhere.





Twice I have saved Orioles that seemed to be trying to commit suicide by hanging. An old bird in search of nest material found a strong thread on a bush in the garden. It was tangled about the twigs and, in trying to loosen it, Mr. Oriole became entangled also. The thread was twisted about one foot and also about his neck, and he was fluttering and pulling with all his strength to get loose, while his excited mate hovered near. The other was a young bird. I noticed it fluttering strangely by a deserted nest in an old pear tree. A second glance showed us that it was a prisoner. It had for some reason returned to its old home and became entangled in the horse hairs that hung from the nest. One of the hairs was twisted about its neck and in its struggles to get free it had only twisted it tighter and was then gasping for breath. As the nest was beyond my reach, I hastened to the house and returned with a broken hoe with which I managed to reach the branch on which the nest was built. The branch was partly decayed and broke easily and nest, bird and all came tumbling to my feet. I quickly released the little prisoner and carried it to the house to show to the rest of the family, but in trying to hold it so that the wondering eyes of my baby nephew might get a peep at it, it slipped from my hands and was gone like a flash leaving me with a feeling of thankfulness that I been permitted to save its life that it might help to brighten the earth with its beauty and song of gladness.

EMMA M. DOAK, Hookstown, Pa.

A BIRD INCIDENT.

One evening my attention was attracted by a persistent tapping at the window, the curtain of which was drawn up so as to allow the light to shine out upon the vine-covered piazza. Going outside, I found a little gray bird fluttering against the pane. It allowed itself to be taken in the hand, and then the cause of its unusual behavior was manifest. The tiny claws were quite bound up and entangled with spider web, so that perching was impossible. We gently unwound the mass and freed the slender feet, and then set the bird at liberty. It flew away, and did not return again to the window.

It was a little plain Crested Titmouse, at that time no uncommon bird in shady Oakland, from which the axe and the English Sparrows have since driven it. While we were freeing its feet, the long crest kept rising and falling with excitement, but not, I hope with fear. A pair had their nest in an old stove pipe hole in the house, though they usually nest in hollows of oaks, and never being molested had become quite familiar.

ANNA HEAD.



Address communications for this department to
 MEG MERRYTHOUGHT, 156 Waterville Street,
 Waterbury, Ct.

DEAR YOUNG FOLKS:

A pair of Bluebirds have their summer home in a box in an oak tree near by. Last winter they rented it, (furnished, I think) to—can you guess to whom? A bright-eyed little fellow with a red fur coat and a bushy tail. Here he kept cozy and warm through winter snows. He was not a tidy a housekeeper, however, as Madam Blue, for when he vacated in the spring, the floor was strewn with shells, and the house was nearly filled with the straw mattress which he left behind, and if we had not cleaned house before Mr. and Mrs. Blue arrived, I fear they would have sought a new nest. You may find summer homes of the birds with many queer tenants, on your winter walks in the woods, not only the squirrels take possession of these deserted homes, but in the cradle where babies in feathers swung in summer sunshine, you may find the little field mice rocked to sleep by the cold winds of winter.

In the Enigma, the Great-crested Flycatcher, in the September number, the number of letters should have been given twenty-two instead of twenty-three. We wish you all enjoyment this month in our American holiday.

Cordially your friend,

MEG MERRYTHOUGHT.

ROLL OF HONOR.

Charles Alexander, Gloversville, N. Y.; Charles H. Abbott, Antrim, N. H., Marietta Washburn, Goodwin, S. Dakota; Louise Jordan, Defiance, Ohio; Jean Lampton, Elmira, N. Y.; Huldah C. Smith, Providence, R. I.

ANSWERS TO OCTOBER PUZZLES.

ENIGMA.

Phoebe.

SUGGESTED BIRDS.

1. Ovenbird; 2. Phoebe; 3. Jay; 4. Indigo Bunting; 5. Old Squaw Duck; 6. Lark; 7. Rail.

EXTRACTS FROM OUR MAIL BAG.

It seems as if it had been raining for the last two weeks. The rain may bring joy to the heart of the farmer, but it brings grief to the ornithologist, for it is destroying hundreds upon hundreds of Red-winged Blackbird's eggs. It may destroy a few Bobolink's and Meadow Lark's eggs. I know of a Yellow Warbler's nest with young in it, which the rain made the mother desert. The Blackbird's build in the tall grass close to the river and the rain has made the river flood up over the grass.

STAFFORD FRANCIS,

Exeter, N. H.

I would like to tell you more about the two bird boxes I put up, and that you mentioned in the August number of the A. O. The Tree Swallows in the first box I put up got a splendid nest all made and then abandoned the box. I wondered if they left because their front doorstep got knocked off, or whether they foresaw that some boys were going to smash it to splinters on the Fourth of July. The Tree Swallows that thought of building in the other box, left, and some House Wrens have taken it and reared two or three broods successfully. The box was spared on the Fourth as the noise of smashing the first box roused somebody who stopped the mischief. I shall put up more and better boxes next year, and see that they are not touched on the Fourth of July.

SAMUEL D. ROBBINS,

Belmont, Mass.

I looked up the chimney one day and saw the nest of a Purple Martin. It may have been a Chimney Swallow's nest, but it was a family of Purple Martins that were living there, for the next day there was a fire started, and two birds were found dead in the fireplace afterwards. The chimney is perfectly straight, and I think that the birds were suffocated by the smoke. The nest is still there as I saw it only yesterday.

SALLY W. ORVIS

Manchester, Vt.

 ENIGMA NO. 1.

I am composed of 8 letters.

My 1-2-3-4 is the shape of my head.

My 5-3-4 is a boy's name.

My 7-6-5 is one of your bones.

My 8-1-2-3 is a gentle bird.

My whole is a fairly common wood bird.

LEWIS S. GANNETT,
Bennington Center, Vt.

ENIGMA NO. 2.

My first is in queen, but not not in king.
 My second is in furs, but not in swing.
 My third is in paint, but not in brush.
 My fourth is in hist, but not in hush.
 My fifth and last you will find in lame.
 My whole is a bird, but what is its name ?

GEOFFRY J. GILES,
 Comfort, Texas.

ENIGMA NO. 3.

The name of a bird is to be found in each sentence, the figures in the blank spaces indicating the number of letters in the omitted words:

(a) When you see me flying over the —4— where my nest is, my long forked tail will tell you what sort of —7— I am.

(b) My mate has yellow instead of the —3— that catches your eye as I —5— out from among the leaves.

(c) I am a shy lover of —5—, but though I am called a —6— I am really a warbler.

(d) My nest is to be found up in the —7—, and when my young ones leave it their flight is nearly as swift as my own.

ISABELLA MCC. LEMMON,
 Englewood, N. J.

QUERIES.

1. What birds have the longest tongues ?
2. What birds have the largest tongues ?
3. What birds have the smallest tongues ?
4. How many broods are raised in one season by the English Sparrow ?
5. What bird lays one egg and hatches it before laying another ?

SOME CURIOUS HOMES.

Come, boys and girls, we want you to go with us on a flying trip to some curious dwellings, built by tiny architects, without tools or hands. As arrangements for a wireless flying machine have not yet been perfected, we shall have to be content with the old fashioned travelling carpet of the ancient magician. There is room for you all, now if you are ready for a start, close your eyes and hold your breath for an instant. *Ci-gam!* Here we are in the center of the Dark Continent where we will inspect the homes built by the Social Weaver Birds for

their young. Hundreds of these birds combine in building an immense tenement house, for protection from the common evening snakes.

All unite in building a straw roof attached to a large branch of a tree, beneath this each couple builds its own apartment, each room opening upon what might be called a corridor, which has many entrances from the outside world. The nests are often several months in building, as they are often torn to pieces and rebuilt several times before the owners are suited. They are made of fine twigs, grasses and fibres, moistened by the saliva of the bird, and woven together so firmly that trees are sometimes thickly covered with nests built by many generations of birds. Other members of this family weave strangely shaped nests. Some hang like a gourd hanging by its stem, others small at either end, and globelike in the middle, and some resemble nicely padded willow baskets. The Mahali Weaver Birds place thorns with the points outwards in the walls of their nests for defense.

In another species we find Mr. Gold-fronted Weaver at his ease in a separate home while Mrs. Weaver ministers to the needs of the family. We cannot tarry to call on others of this interesting family, but as we may never visit Africa again we will call before we leave upon a prisoner. Do you see that beak, nearly a foot long, thrust through an opening in a hollow tree trunk? That belongs to Mrs. Hornbill, who, closed in a dark cell, must pluck her own feathers to carpet her nest, lay her eggs and hatch her little ones. How came she in such a plight? Alas! a cruel husband is the jailer. He closed the prison door, gathering mud and plastering up the entrance, leaving just enough room for my lady's beak. But he is not altogether cruel, for day after day, he works hard to supply her with choice berries and fruits, until the little family have reached years of discretion and are released from confinement.

Now we will hasten to India and stop for a moment to see Mrs. Baya, also a weaver, who is a great pet about the houses of the natives, and is trained to do a variety of tricks. Little Mrs. Baya with her strong curved bill has woven a remarkable tubular structure of various vegetable substances. As this sways from a palm branch, or perhaps from the eaves of a native hut, the infant Bayas greet us from a round window in the side of the nest.

In India, too, in the dense forests we shall find the nest of the Klecho, one of the Swifts, with walls of the thickness of parchment; composed of feathers woven together and cemented with the bird's saliva. The nest is built only large enough to just hold the one egg, and so the walls are too delicate to bear the weight of the mother bird.

She is obliged to perch over the nest and support herself upon the surrounding branches when sitting upon the eggs.

Here we must tarry until December, when our magic rug will carry us to visit other curious homes in China and in our own country.

GLEANINGS.

Many birds feed their mates while sitting, but that bird of odd ways, the Hornbill, has a unique way of presenting his offering done up in a neat package. He swallows the fruit as he finds it, but not for his own benefit, for when he comes to the nest he recovers it snugly wrapped in the lining of his gizzard.

OLIVE THORNE MILLER.

HERMIT THRUSH.

In the deep solemn wood at dawn, I hear
 A voice serene and pure, now far, now near,
 Singing sweetly, singing slowly,
 Holy! oh, holy, holy!
 Again at evening dusk, now near, now far,—
 Oh, tell me, art thou the voice of bird or star?
 Sounding sweetly, sounding slowly,
 Holy! oh, holy, holy!

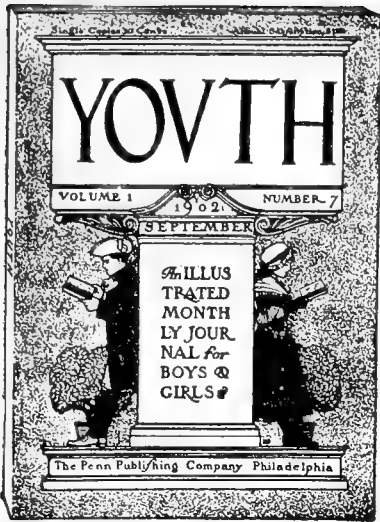
EMILY TOLMAN.

We have had so many write us in regard to the "Letter Puzzle" in the August issue, to give the list of birds found that we give the largest. Quite a number from different states had these, but the Bird Game was only given to the *FIRST one from each state*. Brown Creeper, Crow, Sparrow, Linnet, Martin, Catbird, Goldfinch, Brown Thrasher, Myrtle Warbler, Kingfisher, Kingbird, Siskin, Hen?, Junco, Wren, Cuckoo, Turkey, Chickadee, Phoebe, Nuthatch, Jay, Plover, Gull, Oriole, Robin, Rail, Shrike, Teal, Owl, Chat, Eagle, Flicker, Ibis, Kinglet, Auk, Bobolink, Redstart, Stork, Coot, Ricebird, Eider, Moa, or forty-two in all.

What bird is this whose nest is thus described by Davie:—

"The bark at their entrance is coated with fir-balsam or pitch from an inch to three or four inches around the hole. In one instance the pitch extended down for twenty-one inches, and was stuck full of red breast feathers of the——."

O'er head the balanced hen hawk slides,
 Twinned in the river's heaven below.—LOWELL.



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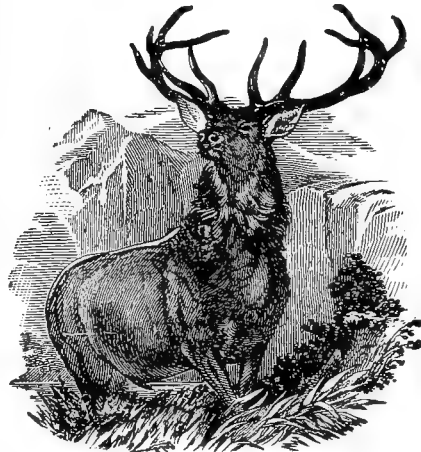
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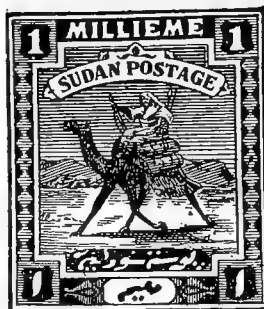
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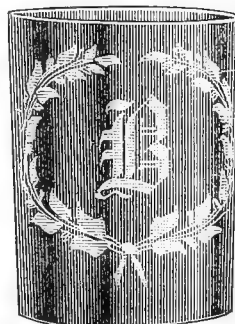


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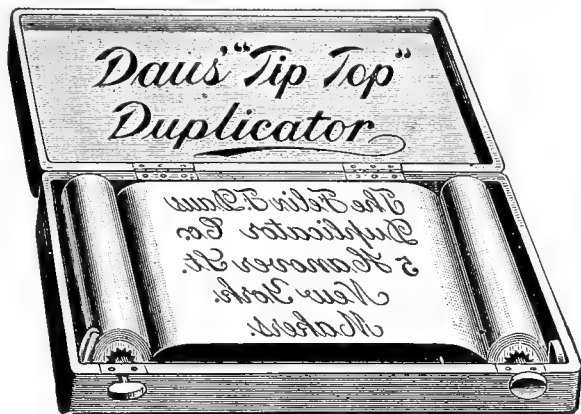
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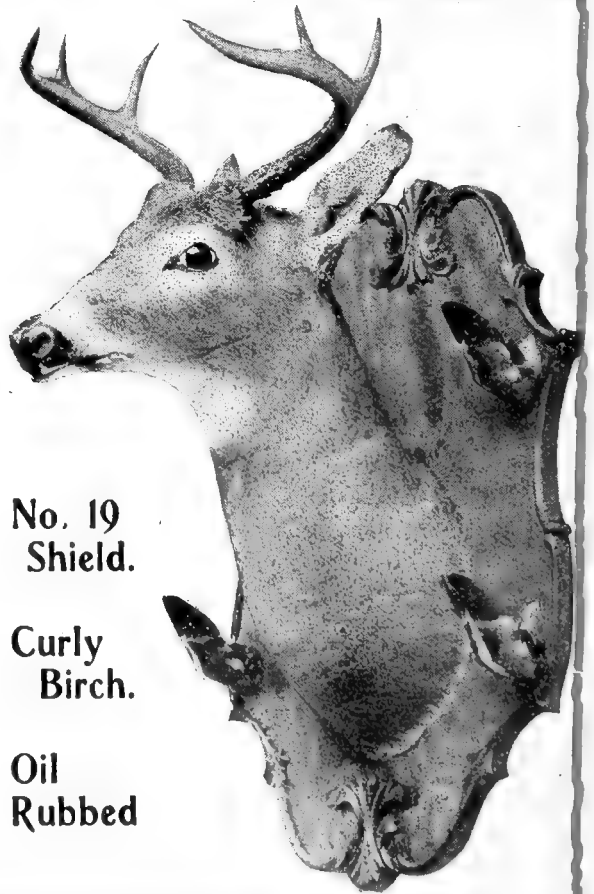
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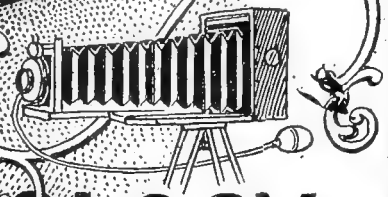


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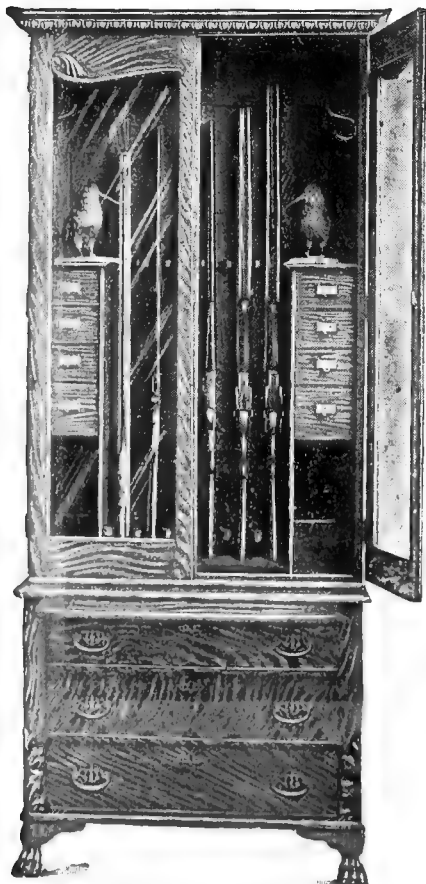
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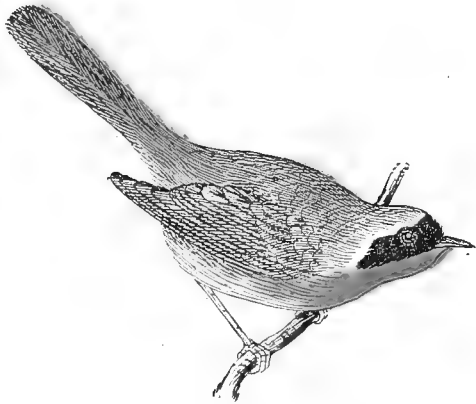
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- 40 Barred Owl.
- 41 Screech Owl.
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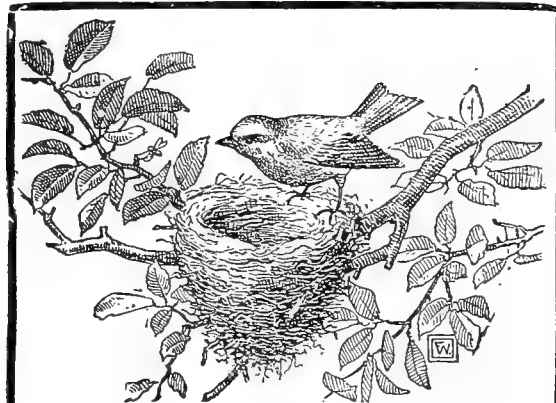
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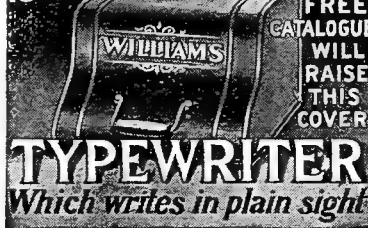
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VOL. III

DECEMBER, 1903.

NO. 12

This issue completes the third volume of American Ornithology. We are pleased with the numerous expressions of appreciation which we have received during the year. We are ready at all times to accept suggestions as to how we may make the magazine of more value to our readers. Commencing with the January number we shall give, each month two or more full page colored plates of birds. These will be designed to show the male and female birds in the breeding plumages and in the winter, and also the young where the differences are appreciable. As we have a very large and fine assortment of photographs of live birds, and nests and eggs, the illustrative features will be better than in any previous volume.

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We wish to call the attention of our readers to the new bird book (Color Key to North American Birds) which is advertised in this issue. This is a very important book for all bird lovers or students and it should be in the hands of all our readers. By ordering it at once you can be sure of a copy in time for Christmas.

THE MARTYRED THRUSH.

The Farmer strolled his orchard through,
Where in the sunlight glowed,
Apples that in such numbers grew
The trees bent with their load.

He found a few pecked by the birds
Among his portion vast,
The birds were doomed with cruel words,
Their days of peace were past.

A thrush, from his favorite tree
Its sweetest melody sang,
The changing notes fell wild and free
Till all the orchard rang.

A shot, it shook the orchard wide,
The air with smoke was filled,
A crimson jet the brown breast dyed
And the sweet voice was stilled.

Upon the soft green turf he lay
Where winds were sighing low,
No more to sing at break of day
When skies are all aglow.

And is that song forever lost,
Lost in the mystic past?
What cared we for the fruit it cost
If its sweet charm might last.

HATTIE WASHBURN



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BLUEBIRD.

A FREE LUNCH FOR BIRDS.

BY B. E. JAQUES.



A CATBIRD started it by flying down on an old carpenter's sawhorse that I fished out of the river. It stood on the edge of a bank which sloped down to a thickly wooded ravine about eight feet from the house. The heavy branches of an oak tree hung over within a foot of the bench so it made a safe and easy approach for the birds as well as a quick retreat in case of alarm.

A few crumbs, accidentally dropped on the bench, caught the quick eye of the catbird.

When they were gone, he looked about, and flicked his tail in a way which plainly said to those who understand bird language, "That was pretty good; I'd like some more, if you please." I laid a handful of cracker crumbs on the bench in anticipation of his return but along came a breeze out for mischief and blew them away. Around a ten by fourteen inch board, I nailed inch strips, which the birds like to stand on, and fastened that securely to one end of the bench. On the other end, I nailed a board just large enough to hold a pan of water. This left three feet of space between victuals and drink for the birds to sit and wait their turn at the frugal board.

Only the catbirds knew about it at first and they became regular boarders, coming with such frequency that they certainly could not spend much of the daylight in searching for other food. Then a big brown thrasher discovered the free lunch and he happened to come just after I emptied a big dish of cottage cheese on the board. I have seen hungry creatures eat but I never saw anything to compare with the manners of that brown thrasher. He gobbled the cheese so rapidly that he had to crane and wriggle his neck to get it down. After he had eaten what appeared to be more than his own weight, he flew away with a huge chunk in his bill. Very soon he returned with his wife and together they made frequent trips to a distant thicket. The catbirds showed equal fondness for the cheese but were better mannered than the thrashers and did not eat so long between visits to their nests.

The sparrows found the lunch counter very soon; nothing ever escapes them, but the big birds kept them in check and they sat with surprising meekness and patience on surrounding branches waiting their turn, or they hopped around in the grass picking up the crumbs that the big birds flung over in their greediness.

The latter part of June, several weeks after the lunch counter was started, a big shiny crow blackbird, or bronzed grackle, called to investigate. He was evidently pleased with the accommodations and enjoyed his meal for he soon returned with his wife. The next day they thought it would save time to bring the whole family. The four rusty, awkward young ones sat on the inch strip side by side squawking vigorously while the parents stood in front of them and literally stuffed them full. The next day they only got an occasional morsel by way of encouragement from the parents who seemed to think that if their children could not help themselves when they stood ankle deep in food, they would have a hard fight for life.

Blackbirds are clannish so these visitors brought all their neighbors and relatives until the climax was reached when I counted thirty birds feeding at one time. A pound of crackers melted away like dew before the sun.

The chewinks, flickers, mourning doves and redheaded woodpeckers were all frequent visitors, but I have never seen a robin dining there although they are very plentiful. Our large wild cherry tree is entirely given over to them every summer. Other birds seem to respect their colonization rights and leave their tree alone for nesting purposes. It may be that the robin is an old fashioned bird and holds to a diet of worms as the only safe and reliable food for young robins.

The redheads were the last to discover the lunch counter. I was watching two thrashers and a catbird when a whirr of wings and a sharp warning clack, which sent the other birds flying, announced the arrival of a redhead. He critically sampled the dry brown bread, crackers and cold oatmeal, then flew away with a lump of brown bread as big as a hickory nut. In a few minutes he was back again from a neighboring telephone pole into which he seemed to be stowing away the food.

Even the casual observer must note the selfish spirit that dominated these pensioners of my bounty. The sparrows drove each other away. The catbirds chased the sparrows and while they were at it, down came a thrasher and took possession only to fly at the arrival of a group of belligerent blackbirds. Then down swooped the redhead with such a whirr that all the birds scattered.

The latest arrival was a red squirrel who picked out the biggest pieces of cracker and sitting up, ate them, not only with evident relish, but much better manners than the birds exhibited.

The catbirds showed the least fear and ate the greatest variety of food. They are very fond of meat and fat and seemed to find something good even when Shep had deserted his bone. Corn meal mixed

with water seemed to be the least acceptable to all the birds, probably because they could not carry it away. The cottage cheese was taken in preference to anything else, crackers next, then bread. Remains of strawberry, raspberry and blueberry cake were untouched until other food grew scanty. Uncooked cereals they would pick at but could not carry away and this seemed to be the chief motive for visits to the counter, during the early part of July when growing families demanded so much food. Hard boiled eggs were eagerly disposed of, the yolks first. Potatoes were left to harden and be thrown overboard. Boiled macaroni was eyed suspiciously until the cheese was gone, then tested and found tolerable by a mother grackle who flew away with two three-inch pieces dangling on either side of her bill.

I must confess, I would not have invited the blackbirds to my feast, not on account of race prejudice, but chiefly because of their discordant voices and quarrelsome ways. Then I do not like the looks of their cruel and expressionless eyes, stuck on the side of their iridescent heads like yellow buttons. The young ones squawk for food as if they were strangling to death and it is distressing to hear it. Early in the morning when all the birds are hungry, they are too intent upon helping themselves to pay much attention to each other. About eight o'clock one morning, I saw one redheaded woodpecker, three thrashers, six sparrows, two catbirds and four blackbirds all eating at one time on or around the bench. An hour later one big domineering grackle successfully kept every other bird away by his threats and sharp thrusts because he had had enough himself.

A WOODLAND APARTMENT HOUSE.

Even the beasts of the field and the birds of the air seem to have commenced the adoption of modern ideas in this progressive age. Last spring we found what might be called an animal apartment house. The whole structure occupies a space of but six feet in length, three feet depth, and seven feet in height, yet it was occupied by four families at the same time. The basement or ground floor was given over to a pair of chipmunks. Their home was dug in the earth directly under the dead trunk of a fallen oak tree, which composed the structure proper. The chipmunk's home is hidden by the plant life which has grown up about the tree trunk, and consequently does not appear in the illustration of the "apartment house." In this illustration, five-eighths of an inch from the left margin and one and one quarter from the bottom is an opening in the stump, which is the entrance to the stronghold of a pair of House Wrens. This family occupied what might be called the first floor of the house. A little more than half way up on the right hand



THE APARTMENT HOUSE.

portion of the stump may be seen a Downy Woodpecker hanging on just below a small round hole. Here he and his mate reared four young Downies. About a foot above the Downy nest, a number of small holes bored in the stump give evidence of the presence of a few "Yellow-jacket" bees who have taken the upper story of this house for the summer. So much for characters that take prominent parts in this sketch.

We were wandering aimlessly along a narrow path, that wound through



Photo from life by C. A. Reed.

DOWNY WOODPECKER, (female).

a favorite wood, when the musical, gurgling notes of a House Wren arrested our footsteps. He was evidently in a pleasant mood, for song after song came from the same place just beyond the brush which separated the woods from the fields beyond. Owing to certain peculiarities in his song and to sudden interruptions from time to time in the midst of his song, we stole forward to see what he was about. We parted the branches and saw the songster just as he left the top of a stump and a Downy Woodpecker dashed by in the very spot where he had been sitting. It was apparent that there must be some feud between these birds and it required but a second glance at the stump to decide what the trouble was.

The presence of two holes in the stump, each of which was peculiarly adapted to the use of the two birds, gave evidence that the Wren and Downy had each decided to make this their abode for the summer, as a matter of fact, the Downy Woodpecker probably had one or two eggs already laid when we found the place, although we did not look for several days to see what the nest contained, knowing the aversion that they have to being disturbed early in the nesting period.

We decided that the Wrens must have put in their first appearance on the very morning that we happened along for they had just commenced work on their nest. Considering the quiet domestic life that the Downies are wont to lead, it is little wonder that they objected to the presence of the boisterous and inquisitive pair of Wrens. They thought,



DOWNY, (on the Wren's stump.)

and correctly, that the continual song of the male Wren, musical though it was, would surely betray the hiding place of the one spot most dear to them. The male Downy took upon himself the task of driving away the unwelcome neighbors. His persistency was commendable but the lack of good generalship on his part rendered the efforts futile. Instead of de-



Photo from life by C. A. Reed.
DOWNY WOODPECKER (male).

voting his energies to, preventing the building of their nest, he would make a fierce dash at the Wren every time he commenced a song. The Wren seemed to greatly enjoy this, regarding it as bird play, and with a break in his song would dodge his adversary and continue his vocal efforts more energetically from his next perch; meanwhile, the female Wren was as busy as she could be, carrying into the hole load after load of dried grasses, feathers, hair and twigs. She was so industrious that she very nearly if not wholly completed the nest the first day.

This Downies nest, being situated so low down (only five feet from the ground), we were very desirous of doing nothing that might cause them to leave, for we had especially been looking for the nest of these

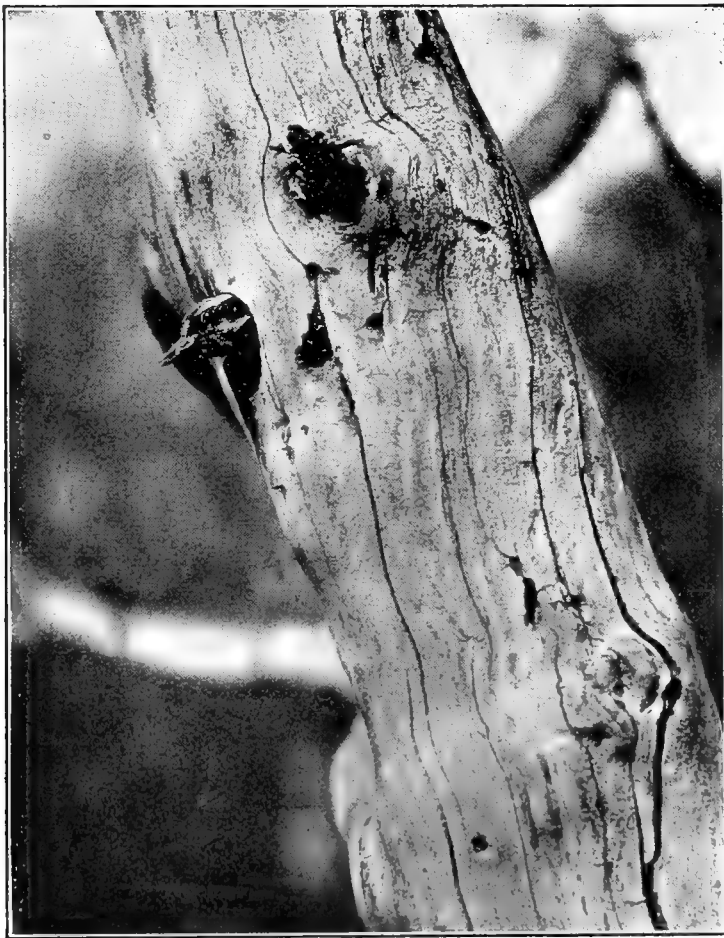


Photo from life by C. A. Reed.

COMING OUT.

birds and this one was in an ideal location for photographic purposes, consequently we did not look into it or attempt to take any pictures until the eggs had hatched, although one of us visited the locality nearly every day to see what progress the two contestants were making in their warfare. The Downy never overcame his dislike for the Wren,

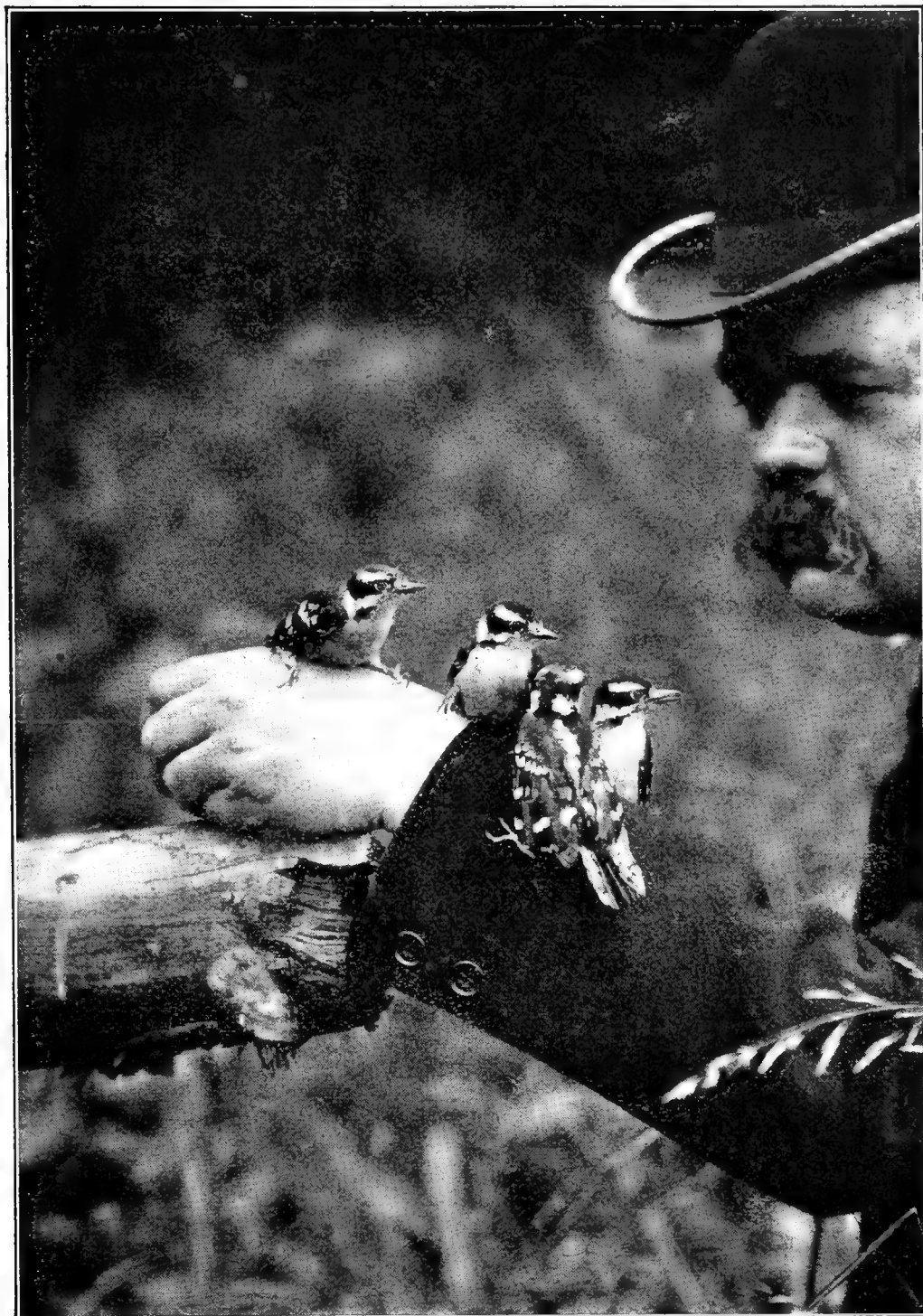


Photo from life by C. A. Reed.

NOT AFRAID.

and while his attacks lacked the vim that he had first put into them, he always drove the Wren away at every opportunity, even when his own young were large enough to leave the nest.

One morning when we called on our two acquaintances, for they were now not in the least timid and would be apparently unmindful of our presence when only a few feet away, we found that both Downies were very busy supplying the wants of a nest full of little ones that had hatched during the previous day. For the first time since finding them we examined the nests of both the Wren and the Downy; the former we found to contain six eggs, the nest being only a few inches down in the stump which was inclined to the ground at quite a sharp angle; the front portion of this nest was built high so that it was impossible to see the contents without pressing it down with a stick. The outside portion was made almost wholly of sticks, while feathers formed the larger part of the inside. The Downies home was a more difficult one to explore. The entrance was exactly an inch and a quarter in diameter and was as round as though bored with an auger. They figured about as closely as possible when drilling this hole for there was no spare room when they were entering, their wings being forced closely down against their sides; inside the stump it widened to about four inches in diameter, thus making a very cosy home for their young. In order to see the bottom of the nest we had to have recourse to two mirrors, one a strip of glass an inch wide and the other an ordinary mirror to reflect light into the hole by means of the first which was held inside; by this means we found that there were four naked little ones lying at the bottom of the hole on a bed of chips which had fallen within while the house was being built.

While we were looking over the nests a shrill whistle and then muttered grumblings coming from some where down in the ground were our first intimation that we were intruding on the premises of a Chipmunk. We subsequently found that he too had his troubles occasionally. All was well while he kept his place on the ground floor but when he ventured up on the stump, either the Wren or Woodpecker would be sure to see and try to dislodge him. It was comparatively easy for him to dodge the Woodpecker for they are not very agile while on the wing, but with the Wren it was a different matter, for by using both wings and feet he could scramble around the trunk even faster than could the Chipmunk. His attacks were very furious and were accompanied by a violent chattering sound, and he rarely failed to drive away his four footed neighbor.

I believe it is as yet an undecided question whether the Chipmunks to any great extent, trouble breeding birds, but I hold the opinion that they are responsible for the loss of a great deal of bird life. At any rate, nearly all birds seem to regard them as their enemies and frequently attack them when they are found among the branches of a tree, as they very frequently are.

Both the male and female Downy would enter and leave the nest without regard to us, even though we were standing nearly within arm's reach of the hole. Consequently we were easily enabled to get a large series of photos, some of which are reproduced here. The adults made trips alternately at intervals of about every five minutes, one generally remaining in the nest until the other had arrived, when the one who was within would come out with a rush, entirely frustrating all my attempts to get a picture of both birds at the same time, one clinging to the tree and the other just coming out of the hole. Nearly always the birds would bring only what they could conveniently carry in their beaks, but occasionally one would make a "strike" somewhere and return with a large mass of white grubs and insects protruding from his bill.

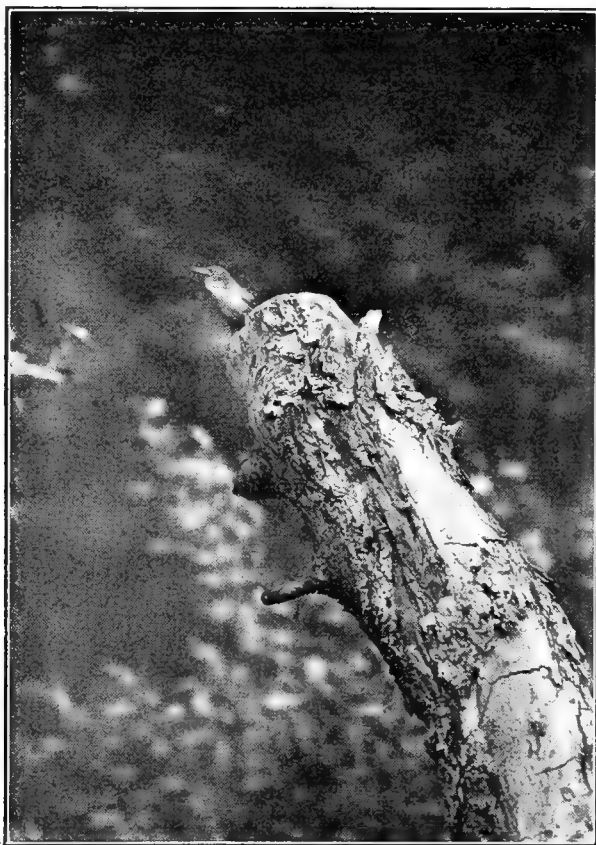


Photo from life.

HOUSE WREN.

It was while watching this feeding of the young Downies that we first discovered that the upper flat was occupied by "Yellow-jackets." We had supposed that the holes which we noticed above the Downies were made by the Woodpeckers. At different times we had seen what appeared to be small clouds of dust or smoke emitted from these smaller holes, as though some one were inside and blowing outward through them. As we looked we saw a bee enter one of these openings. Investigation revealed the fact that each of the holes from which we had observed the clouds escaping were occupied by bees, which as they bored would kick the borings out. Evidently the Downies feared these insects for on several occasions when a bee would happen to fly near, they would appear to dodge them, and once we saw one of the Downies make a complete circuit of the stump in his endeavor to escape them. At another time we saw one of the birds catch one of the bees and carry it to the young ones, showing that while they did not like the insects as neighbors they did not object to using them as food.

The young were gradually taking on a suit of feathers similar to their parents and on the twentieth day from the time they hatched, they left the nest. Except for being perhaps a trifle smaller, they were the exact

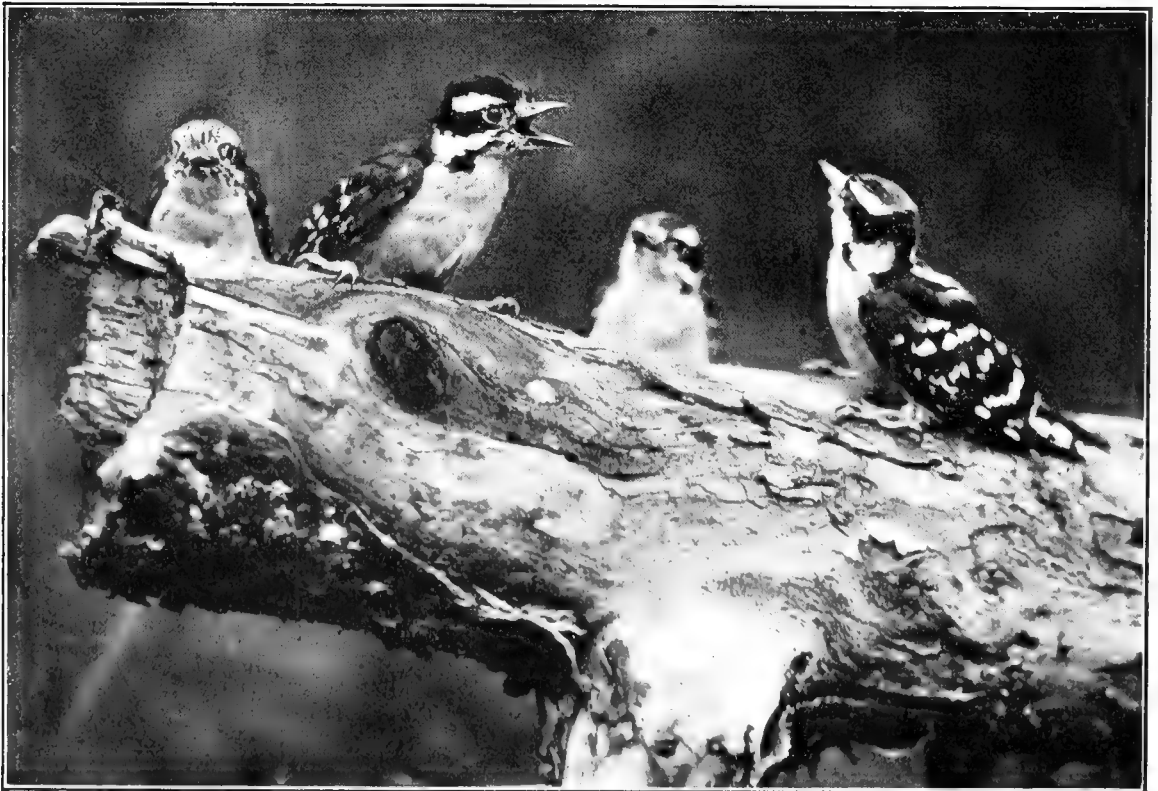
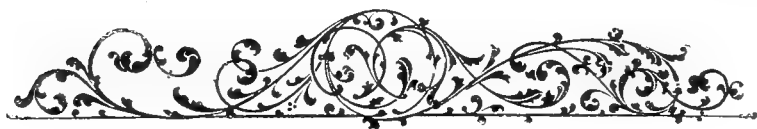


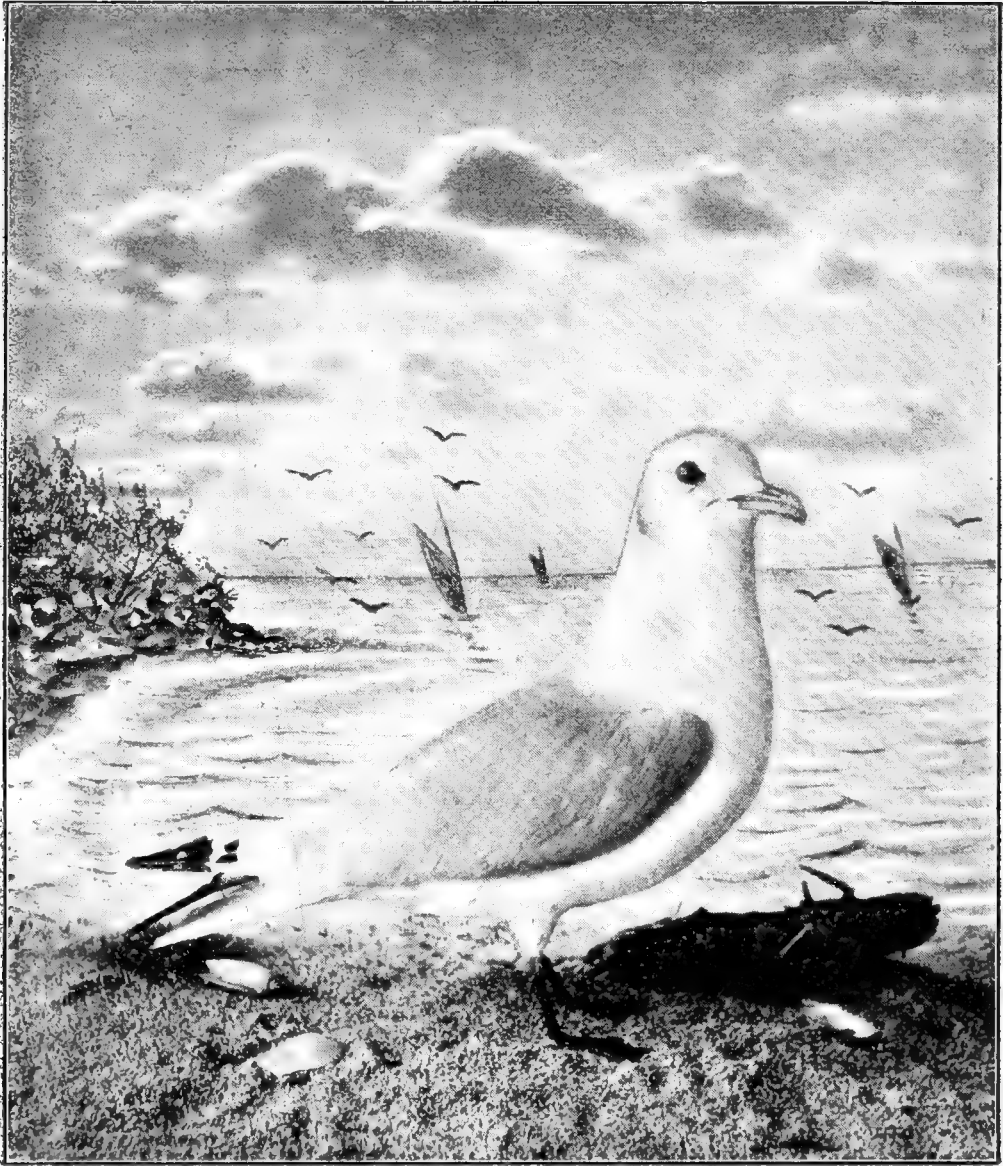
Photo from life by C. A. Reed.

YOUNG DOWNIES.

counterpart of their parents, but they looked much better than the latter as their plumage was fresh and fluffy while that of the parents was considerable frayed at the edges. The young climbed all over the stump, even to its highest point. They were even more fearless than their parents, indeed they had not as yet ever met with anything to cause them to know what fear was. They allowed us to pick them up without offering to try to escape. After we had made a number of exposures of them as they climbed about the tree they were grouped at the end of a limb as shown. My father then placed his hand on the end of the limb, whereupon three of the little Downies of their own accord immediately climbed to his coat sleeve and the remaining one was placed upon his hand. Although some might claim that it was personal magnetism that drew the little birds to him I think that their subsequent actions will prove that they merely regarded him as a convenient stepping stone, for they one by one climbed to his shoulder and made their maiden flight to the woods beyond.

A few days later when we tapped gently upon the limb in which the young Wrens were located, a wild scramble ensued, and six bright and active little brown birds made a dash out into the world, some going between the fingers of the hand that was clapped over the entrance to restrain them. The most diligent search under the stumps and through the long grass failed to reveal more than one of them. They scampered through the grass like so many mice and hid themselves just as effectively. The Chipmunk now has full possession of the apartment house for both the Wren and Downy have moved away, not however before they had completely exterminated the colony of bees.





KITTIWAKE GULL.

KITTIWAKE.

A. O. U. No. 40.

(Rissa tridactyla.

RANGE.

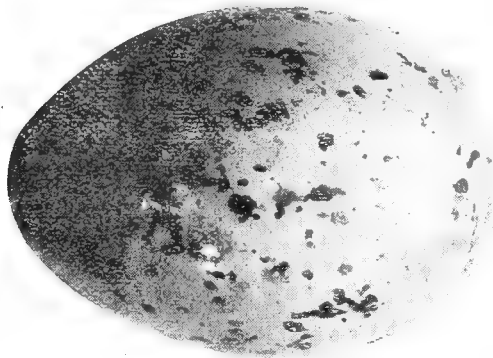
Northern parts of North America. South in winter to the Great Lakes and New England. It is replaced on the Pacific Coast by the Pacific Kittiwake (*R. t. pollicaris*).

DESCRIPTION.

Length, 18 in.; extent, 36 in.; tail, 5 in. Adults.—Bill yellowish; feet blackish; eye ring red. Whole head, neck, and under parts, also tail white. Back or mantle bluish gray. Tips of the primaries black. In winter the back of head and neck and also sides of breast are nearly the same color as the back. Young birds have the bill black and there is a well defined dusky spot in front of, and another behind the eye.

NEST AND EGGS.

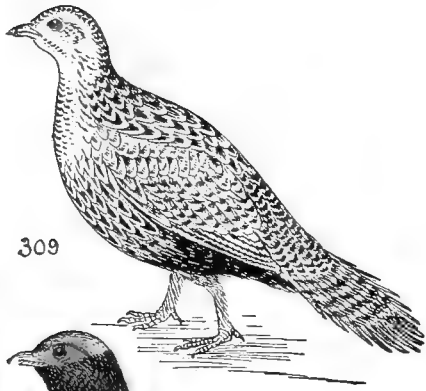
A very abundant species breeding on the islands of the Atlantic Coast from New England northwards. Also breeds abundantly on rocky cliffs, placing the nests on the narrow ledges. The nests are made chiefly of seaweed. They lay two, three, or very rarely four eggs early in June, or the latter part of May. They have a buffy or greenish ground color and marked with blotches of brown and lilac.



HABITS.

Though not very common birds in the limits of the United States, these gulls are one of the most numerous in the Arctic Regions. They build their nests in large numbers on Bird Rocks in the Gulf of St. Lawrence, being one of the few Gulls which make a practice of placing their nests in other situations than on the ground. They are very noisy birds and their notes when angry, especially, sound like the repetition of the name, "Kittiwake, Kittiwake." Their flight is very easy and buoyant, and they can also swim and dive well. Sometimes they hover over their prey in the water and then suddenly dash at it. They are not at all shy and are easily tamed, and often kept in confinement where they are said to live a great many years. They feed chiefly on small fish and shell fish.

Identification Chart No. 23.



309

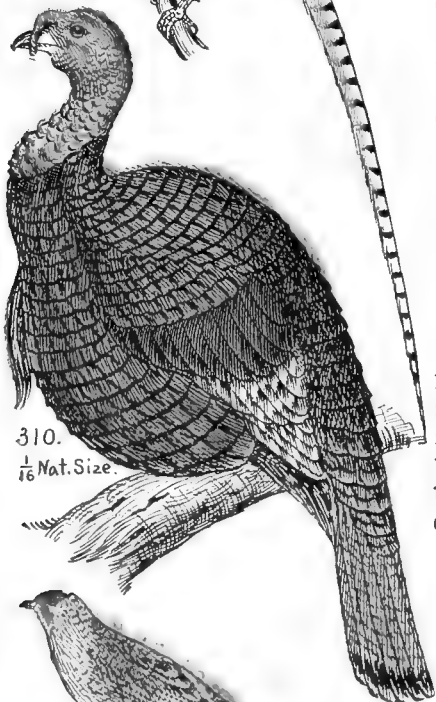
No. 309. Sage Grouse (*Centrocercus urophasianus*).

Found in the Rocky Mt. region of United States from New Mexico northwards. East to Nebraska and the Dakotas and west to the Sierra Nevadas in California. Length from 22 to 30 inches, the smaller dimensions being for the female. Plumage much variegated with black, white, buff and brown. Underparts black. Female smaller and with a shorter tail.

 $\frac{1}{10}$ Nat. Size.

Ring-necked Pheasant (*Phasianus torquatus*).

This is one of the varieties that have been introduced into this country and seems to thrive here better than any of the other varieties of pheasants, especially in the northwestern portions of the United States. Length of male from 30 to 32 inches; female about 24 inches. The female is entirely different in plumage from the male. The markings are somewhat like those of the Sage Grouse but the coloration is more brownish, and the belly is whitish. The central tail feathers are much longer than the outside ones.

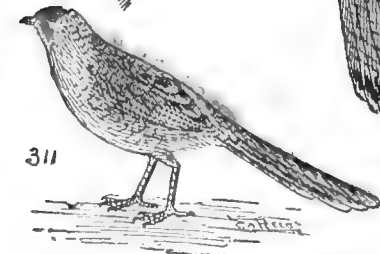


310.

 $\frac{1}{16}$ Nat. Size.

No. 310. Wild Turkey (*Meleagris gallopavo silvestris*).

The common Wild Turkey is found in eastern United States from Pennsylvania to Florida. Merriam Turkey (Merriami) is found in the middle southwest; Florida Turkey (osceola) is found in southern Florida, and Rio Grande Turkey in the extreme southwest. Practically the only differences in these birds are in the coloration of the upper tail coverts. Length about 4 feet.



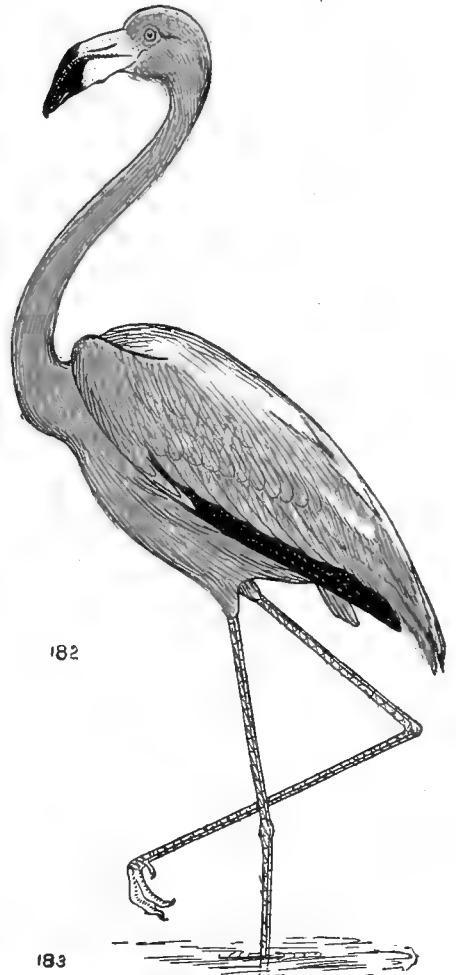
311

No. 311. Chachalaca (*Ortalis vetula macalli*).

Found in the southern parts of New Mexico and Texas. Adults.—Entire plumage dusky tinged on the back and wings with olive brownish. White tips to the outer tail feathers.

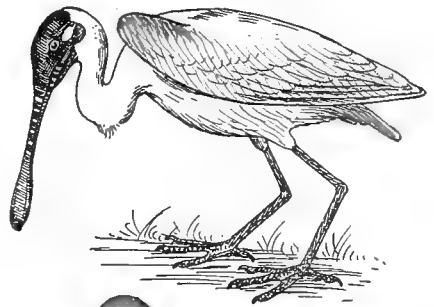
No. 182. Flamingo (*Phœnicopterus ruber*).

Found along the Gulf Coast but more particularly in Florida. Length from tip of bill to tail from 40 to 48 inches. Adults.—Color varies from a rosy red in salmon to white, lighter on the back; primaries and secondaries black. Young, grayish above, lighter below.



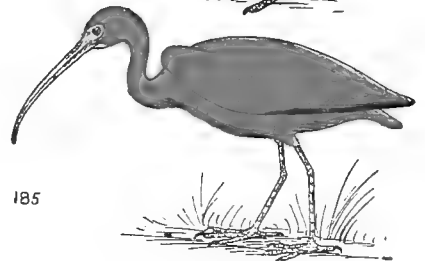
No. 183. Roseate Spoonbill (*Ajaja ajaja*).

Found along the Gulf States, particularly in Florida. Adults.—Length about 32 inches. Neck and breast white, with the slightly lengthened feathers on the back of head and breast tinged with carmine; rest of plumage pink, with the shoulders and tail coverts carmine; tail a dingy buff color. Young, chiefly white, with the shoulders and tail coverts pinkish and no buff to the tail. Whole head and throat of adults bare. Bill flattened, very broad and thin at the tip



No. 185. Scarlet Ibis (*Guara rubra*).

Has been found in former years along the Gulf Coast but no U. S. Records have been recently made. Common in northern South America. Adults.—Length about two feet. Entire plumage scarlet, except the tips of the primaries which are black. Young are grayish or brownish from which plumage they change gradually to the scarlet, the head and neck being the last to change.



YELLOW-LEGS.

A. O. U. No. 255.

(Totanus flavipes.)

RANGE.

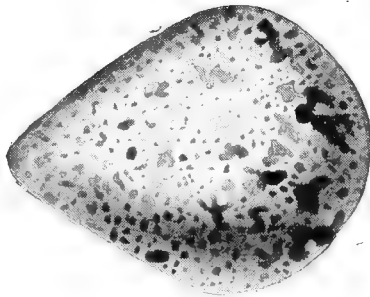
Found throughout North America. Except for an occasional pair that remain to breed in the central portions of the United States, they breed north of our borders.

DESCRIPTIONS.

Length about 10 in.; extent, 20 in.; tail, 2.5 in. Except for size, the Lesser Yellow-legs is identical in plumage to the Greater Yellow-legs. Upperparts blackish, or dark grayish, specked with white; head and neck streaked with white and gray. Upper tail coverts mostly white; tail barred with white; underparts white, streaked on the breast and flanks with dusky, generally in the shape of arrowheads. The winter plumage varies but little from the summer, being somewhat lighter on the back and with fainter breast markings.

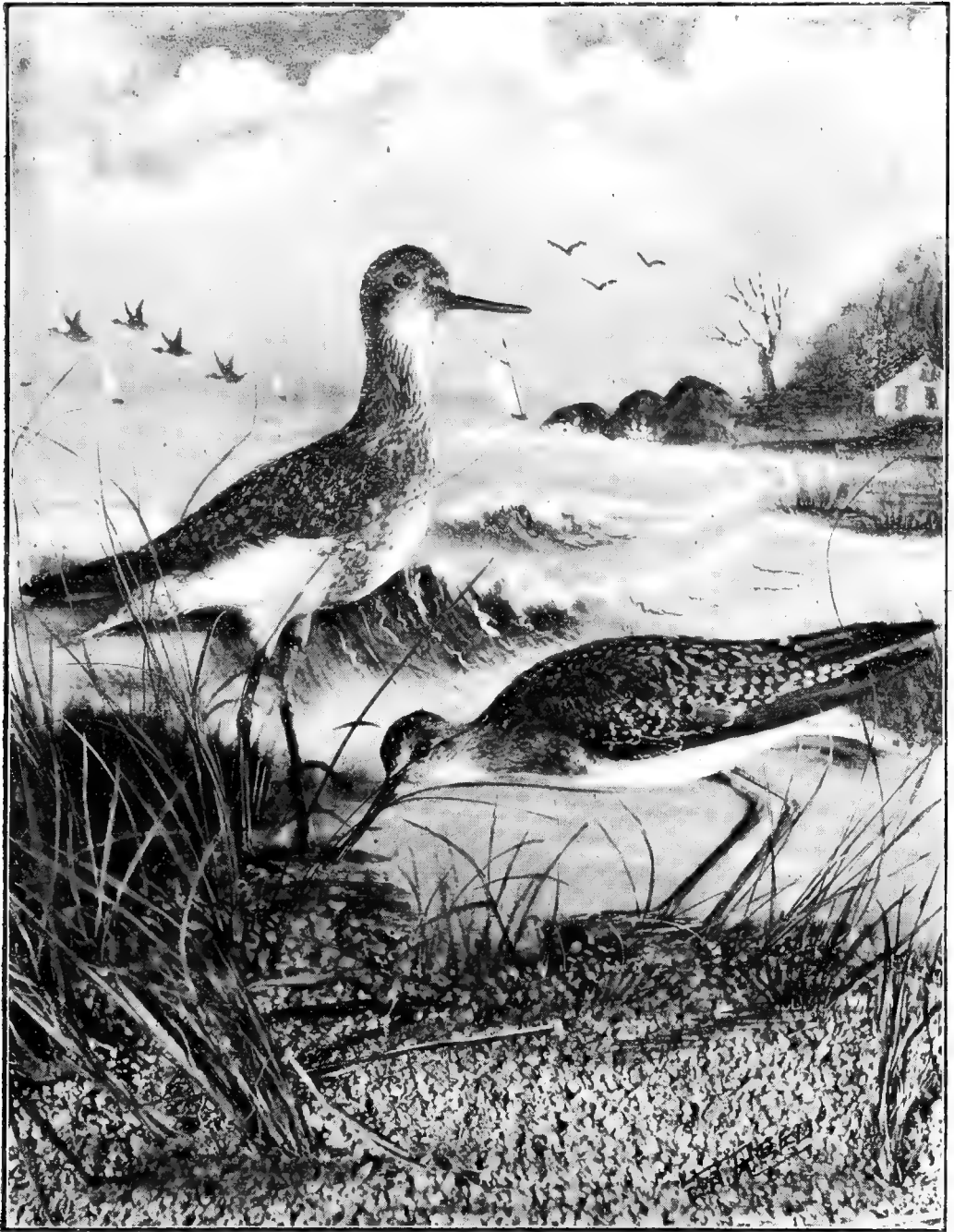
NEST AND EGGS.

Yellow-legs nest about the 1st of June, laying their three or four eggs in a tuft of grass, within which a few dried grasses have been wound in the semblance of a nest. The eggs have a grayish or buff background and are boldly blotched with varying shades of brown with fainter shell markings of lilac.



HABITS.

These birds are chiefly migrants within the United States, large numbers of them passing through in the fall and fewer returning to their breeding grounds in the spring. Those that neglect to return with their comrades on the march northwards are the luckless individuals that have fallen victims to the aim of the sportsmen, for these waders are among those that are much sought by those who delight in killing. They travel in flocks, sometimes in company with their larger and almost identical relative, the Greater Yellow-legs. They are easily called to decoys by an imitation of their whistle. The hunter who is concealed behind a blind, waits until the flock is about to settle among the crude decoys which are perched out on the sand, and then with a well directed shot, kills or maims sometimes several at a time. Very often



YELLOW-LEG.

a flock, even though it has just been decimated by an attack of this kind, will immediately return to the same decoys upon a repetition of their call and meet with a second loss, before they decide to keep away from such an unhealthy locality. They are quite shy if they see a man on foot, but they have yet to learn that the invisible man, the one who is concealed behind a brush heap is the more dangerous.

It is almost impossible to stalk them when they are feeding along the marsh as they are very keen sighted, which fact very often saves the lives of other varieties of shore birds, for on rising the Yellow-legs give warning cries which startle all the other birds that may be within hearing.

Although large numbers of them are found along the coast in the fall, they are, I think, the most numerous in the interior along the fresh water marshes.

They do not stop but a few weeks in the United States and the majority pass along and spend the more severe part of the winter in South America. Their food is the same as that of the majority of the waders, small crustacea and worms. They wade quite deep while feeding, immersing their head and neck to reach the morsels that are below water. It is said that they are good swimmers also, using their wings rather than their feet as paddles.

BIRD-WIT.

BY EDGAR BOYER.

Several instances have come under my notice, in studying bird life, that lead me to believe that our little brothers of the air are gifted with a higher order of intelligence than they are usually credited with. They either possess some pretty sound sense or else their instinct is certainly wonderful.

A few summers ago a pair of wrens chose for a nesting site the twine-box of a binder. The box was cylindrical in shape and might have comfortably sheltered half a dozen pairs of wrens. It was of sheet metal and the wrens gained entrance by four two inch holes in the sides, which served as either doorway or window. They half filled the box with all shapes, sizes and kinds of sticks, small sticks of course, and yet some of them were very large for a little wren to carry. I watched them as they built and noticed that they left a hole down through the sticks on one side and naturally supposed they would line this for their nest. Then several days passed but they made no further progress. I couldn't imagine why they didn't line the nest. Every time I approached the box both wrens were there ready to give to me a tongue lashing which they kept up until I beat a retreat. One day,

after nearly a week, curiosity having taken a strong hold on me, I determined to investigate and regardless of the ear splitting chatter of the wrens within a foot or two of my head, I raised the lid of the box. Until now I had satisfied myself with merely peeking in through the holes. When I looked in from above a gallon of innocent looking sticks with a hole down through one side was all that met my eye. I thought the sticks looked rather thin on the opposite side however, and on drawing them aside, the real nest was revealed to me. It contained six eggs. The entrance was so hidden by projecting sticks, as to be unnoticeable. Of course when one visited the nest daily, as I did, he would be almost sure to discover the ruse sooner or later, but a casual passerby would in all probability have, on peeping through the hole into the box, taken for granted that the nest was not yet completed and gone on his way while the little wren settled down on her eggs, none the worse for the seemingly narrow escape. In the course of a couple of weeks every egg had transformed into a helpless, featherless, skinny mite of a bird. A few days later, knowing the harvesting season was rapidly nearing, I thought I would transfer the young wrens from the twine box to another I had fastened up nearby, but when I went to the nest I found it empty. Perhaps my frequent visits had made the wrens feel uneasy and they had removed their young ones to a new home.

Another occurrence that seems to prove a bird's intelligence was the act of a mother quail.

A few years ago, in an out of the way corner of the farm, I surprised a family of Bob-whites in the act of taking a dust bath. We discovered each other—they and I—at about the same moment. Without a moment's delay the male whirred away leaving the others to care for themselves as best as they could. There were nearly a score of little ones, and from the glimpse I got of them, as they scurried here and there over the trampled weeds, they were but a few days out of the shell. In less time than it takes to tell it they had disappeared, in a manner as mysteriously as it was sudden. Not until the last of the little ones was out of sight did I turn my attention towards the mother bird, who was stumbling and tumbling over the weeds and gradually working her way toward some standing weeds a short distance away. She lingered as if to attract my attention as much as possible. They had all taken me so by surprise that I had not left the spot from which I had first seen them. After they had all hidden I walked to the place where the little ones had been, but not one of them could I see. All was very quiet for perhaps ten minutes and then I heard the mother

call, from out in the weeds. No answer came till she had repeated it several times, then there was a very slight rustle about my feet, as some half dozen little black and brown creatures appeared coming from under weeds, fallen grass and anything that would afford them concealment, all running towards the mother just as fast as their little legs would carry them. After they had gone a few feet they would suddenly dart under the first cover that offered, as if afraid the danger was not yet over. Then others would appear all making for the mother's call. In their haste their little feet persisted in catching in the grass, tripping them and frequently turning them heels over head, but they were instantly up and gone again. Sometimes they would run squarely into obstacles they could never have hoped to mount. Perhaps they expected such things to fade into air—it looked that way to me anyhow—but I fear they only caused their heads to ache from the hard knocks. Finally sixteen had entered the weeds and evidently reached the mother's side but she kept calling. I suppose the sixteen were all she had as I saw no more in the open space, and wondered why she kept calling, when, as if in answer to my thought a very faint and frightened "peep"-like note came from somewhere near my feet, and another little fellow soon ventured from his hiding place and proceeded with all possible speed towards his mother. O, how he did run. A moment later the old bird ceased calling and I could hear the contented chirps of all as she led them off through the weeds.

During the latter part of May, 1902, a meadow lark's nest was discovered in a meadow in which a few cows were kept. When discovered, the nest contained four young birds, perhaps a week old. The nest was a typical example of the meadow lark's skill, fairly well concealed, and very cozy inside. I noticed with pleasure the thrifty appearance and rapid growth of the little birds until they were pretty well feathered out and then, one day when I went to make them a visit I found instead of the nest a cow's track in the bottom of which was a bloody mass of flesh and feathers. Four little mangled corpses, all that was left of the four little quiet, bright eyed creatures I had looked down upon only a few hours before. As this nest was all that had attracted me to the meadow, I went there no more for nearly two weeks, and then I went for the special purpose of finding if possible their new nest, for I knew enough about them to know they would not cry long over spilt milk, so to speak. Almost as soon as I reached the meadow, I heard that well known sputtering cry that always greeted me when I went there. I perceived the lark in the top of a tree, fifty yards from me, where with head erect and tail nervously twitching she sat for several minutes every now and then uttering that peculiar protest.

After a little she left the tree and sailed out across the meadow, alighting on a weed that swayed to and fro and with weight.

Here she assumed the same nervous attitude and manner as before but only for a moment when she dropped lightly into the grass. A quarter of an hour later I flushed her in that very spot, and, on examining the grass, soon located the doorway to her nest, a veritable little bower, and one of the finest specimens of bird architecture it was my pleasure to behold. I had thought the first nest a good one but it was as no nest at all when compared with this one. The door was concealed and gave entrance to a little room four or five inches in diameter, and ten inches long, at the back of which reposed five eggs which detracted none from the beauty of the little home. It is probable that the birds in concealing this nest with such pains did so thinking to avoid a repetition of the first sad accident.

OLD FRIENDS FAR FROM HOME.

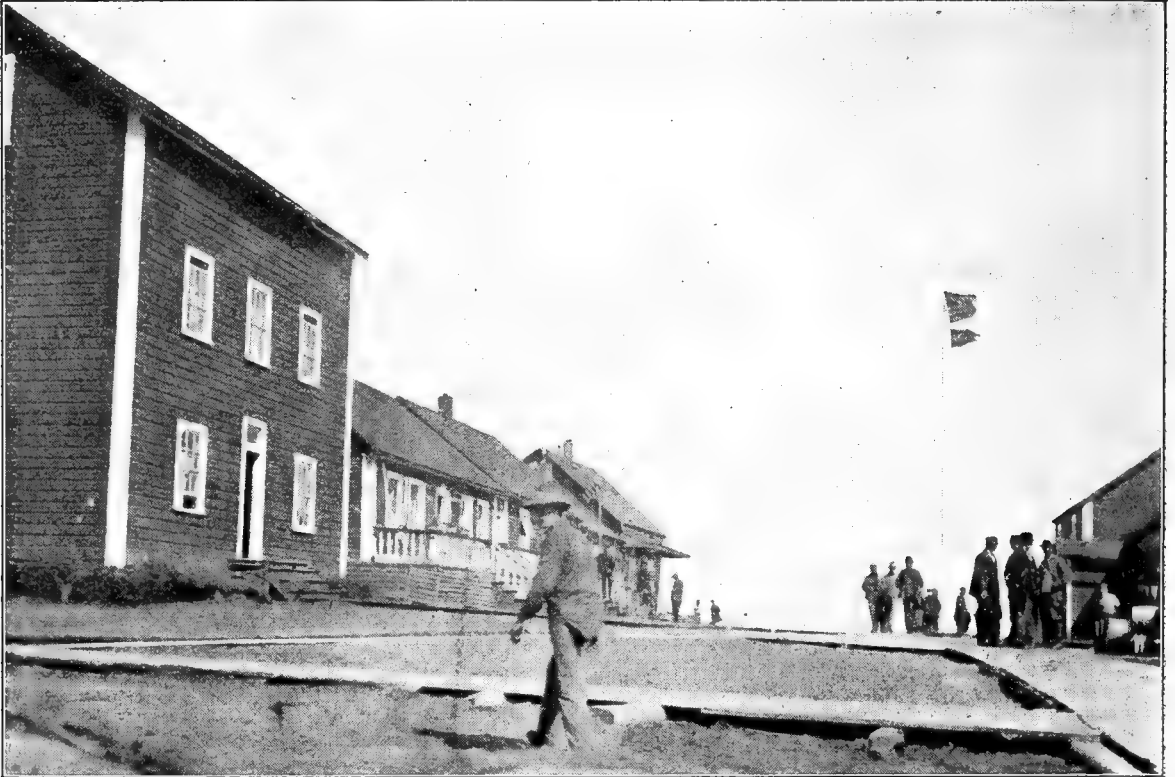
BY CHAS. E. INGALLS.

Previous to the Klondike gold excitement, very little was known of the animal life of Alaska, and especially of that portion of it bordering on Behring Sea and the great interior drained by the mighty Yukon river. Many surprises awaited those who were the first to spy out the land with eyes trained in the school of observation.

The bird life especially, was very abundant and interesting. Forms new and strange to eastern eyes coming under observation almost constantly. The observer was ever expecting strange sights, and expectations were being coined into realizations at almost every turn and Coues Key was always close at hand and in demand constantly.

Personally I can say the most pleasant surprise of all was experienced as I first stepped ashore at St. Michael's on a pleasant July morning.

I saw a flash of feathery light before my face that seemed strangely familiar. I stayed and tried to follow it with my eyes but it had gone behind a building and I turned my attention to the strange beings more or less human who formed one of the rarest exhibitions of types of the genus *homo* ever brought together by that most powerful of all agencies for good or evil—gold. But again that strange but familiar sprite claimed my attention and the other wonderful features ethnological, entomological and zoological of the unique gathering were all forgotten in the stronger attraction exercised by a *Barn Swallow*—yes, it was



surely he. Dear old *Hirundo*. The same iridescent blue claw hammer coat, the same brown vest and white duck trousers. Describing the same matchless curves to the accompaniment of the same sweet twitter. And yes, there is the same nest plastered, not to the rafters of a barn, for there were no barns in St. Michaels as there was nothing to put into them, there being neither horned cattle nor horses, only a flock of sheep which had to be shipped south to spend the winter, but on the rafters of an open porch of one of the old log buildings built by the Russians when they first occupied this country over two hundred years ago, and when the writer was there used by the U. S. Government as a Custom House. Here our little friends had built their nests. The situation most like that usually chosen by the Pewee at home, but still a typical Barn Swallow's nest lined with feathers, not of the barn yard fowl as is the case at home where they are easily gathered right under the "swallow hole" of the old barn but of rarer species, even the soft down of the eider ducks which were abundant near shore and possibly some rarer still, may be of the Rosy Gull or other fair wanderer of this northern clime.

St. Michaels, Alaska, looking towards the sea and showing nearly all the frame buildings in the place, offices of the commercial companies

and the U. S. custom office, whose flag is seen in front of the next to the last building on the left.

I spent some time at St. Michaels and I never tired of watching these birds so well known throughout their range, which covers the entire continent from the Atlantic to the Pacific and from the Arctic Circle to southern Brazil. They seemed like old playmates from my Massachusetts home and I often found myself in the vicinity of the custom office quarters, which was the last building on the left of the photograph, taken facing directly out over Norton's Sound.

On July 12th, the eggs were laid and incubation had evidently begun. On August 22nd when I was again at St. Michaels not a swallow was to be seen.

I saw nests of this swallow on the face of a cliff a few miles below Nulato on the Yukon River. They were built in a compact colony of ten or more nests under a slightly projecting shelf of rock and may safely be taken as examples of what this species must have used as nesting sites before that interloper—the white man—began to build shelters for his crops and stock, called barns, the rafters of which were adopted by *Hirundo* as nesting places and who by that act became at once a "barn swallow." At about the same time probably his cousin *Petrochelidon* adapted himself to new conditions and changed from a Cliff Swallow to an Eave Swallow to the lasting benefit of all concerned.



A HAIRY WOODPECKER.



ATHER early one morning during the first week of June, my sister came to my room and told me that there was a bird in her room downstairs. I asked her what bird it was, but she was unable to tell me. She had gone into the room to get something and had found a bird between the window and the screen! My sister at once pulled up the screen releasing the bird into the room.

I hurried down and to my surprise found a female Hairy Woodpecker. From my sister's description of the

bird I had been unable to guess who our prisoner was.

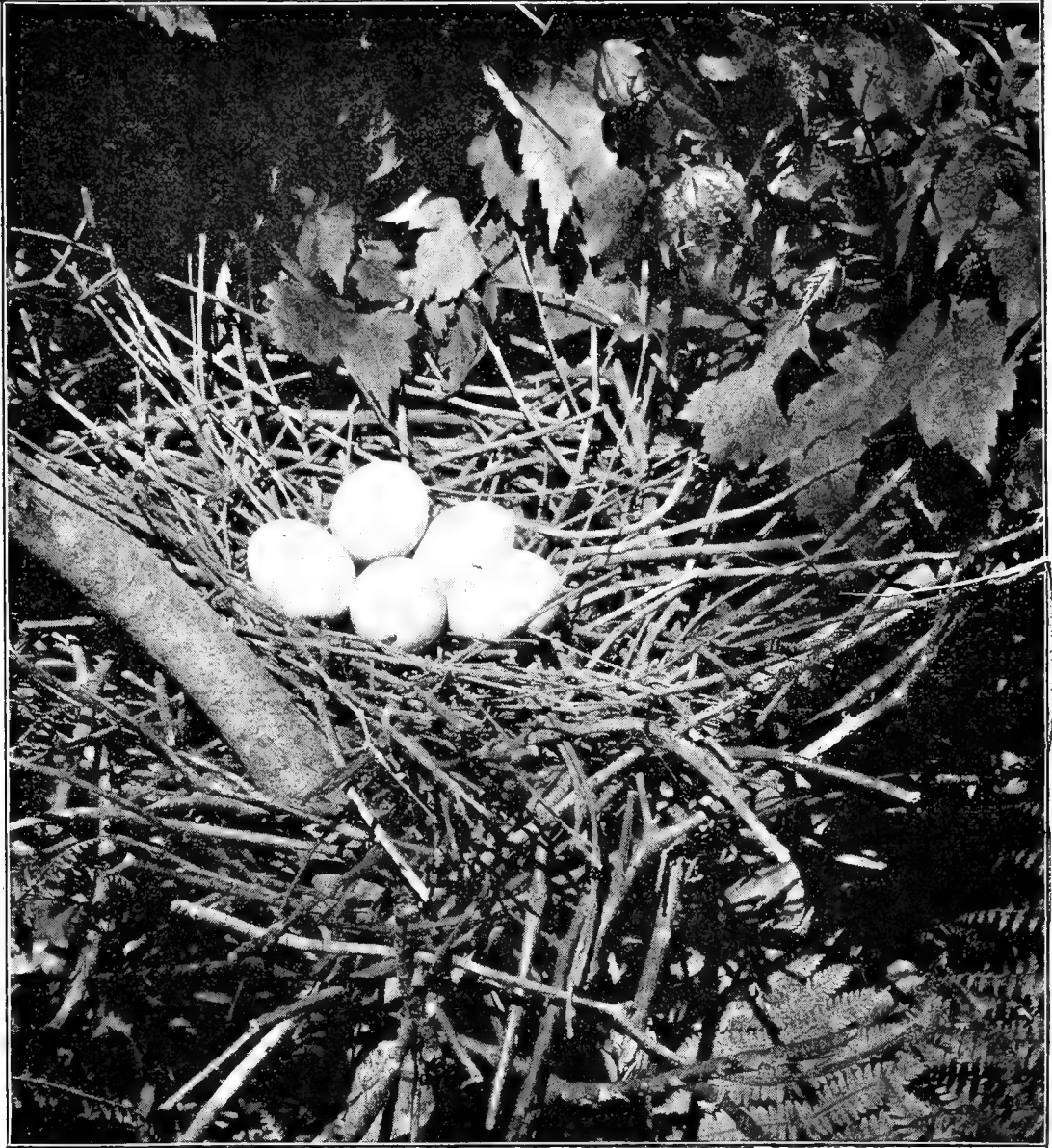
One window was open and I opened a second one, pulling the shades down half way so that the bird would not kill herself by flying against the window-panes in trying to escape.

The Woodpecker fluttered about the room, evidently very much frightened. She occasionally clung to the mouldings, bracing herself against the wall with her tail. Several times she perched on the curtain-poles, and once, hung absolutely upsidedown from one of those rods, at the same time craning her head around to be sure of where I was.

I had been in the room some time, and during that time the Woodpecker made no attempt to escape, so I took the screen out of the third window, and was just going to open the window, when I looked around and found that the poor frightened bird had successfully escaped while my back was turned.

I was very much surprised to find that a Hairy Woodpecker ever came near houses in warm weather. I supposed he remained invariably in the woods. It was also a mystery to us all how it succeeded in getting *between* the window and the screen.

JEAN LAMPTON.



GREEN HERON NEST.



Address communications for this department to
 MEG MERRYTHOUGHT, 156 Waterville Street,
 Waterbury, Ct.

DEAR YOUNG FOLKS:

We bring to you greetings for December. What pleasant visits we have had in our corner with little friends scattered throughout all the states of our Union, and even over the Canadian borders.

We hope that this month, which closes the second year of these Bird Chats, may be a milestone which shall mark progress in good fellowship between our young folks and out of door life, for such sympathy makes the life broader, and brings with it a great deal of fun, as many of you have discovered.

We are grateful to the many lads and lasses who have given Uncle Sam messages to bear to this corner,—birding adventures, puzzles and words of good cheer.

There is a chance this month for you to work a little problem in arithmetic. If the statement is true about the increase of the English Sparrow, how many will gather at the family reunion of one sparrow couple at Thanksgiving time?

One of our readers sends a different view of the hummer in captivity, perhaps some of you can give another instance. Another reader gives an interesting account of one of those curious accidents in Bird Land, which are more common than we may think.

Wishing you all a very Merry Christmas, I am

Your friend,

MEG MERRYTHOUGHT.

ROLL OF HONOR.

Huldah Chace Smith, Providence, R. I.; Stafford A. Francis, Exeter, N. H. Geoffrey J. Giles, Comfort, Texas; Everett P. Walton, New Vineyard, Me.; Earle Tiffany, LaCrosse, Wis.

ANSWERS TO NOVEMBER PUZZLES.

Queries. 1. The tongue of the woodpecker is pointed at the end, with a number of barbs, and he can extend it four or five times the length of his bill. When he has broken away the bark of a tree with his powerful bill, he suddenly darts out his long tongue and spears an unsuspecting insect and instantly brings it into his mouth.

No. 2. The largest tongues are owned by birds of the duck family. By the delicate sense of touch possessed by the tongue, members of this family collect their food. They thrust the bill into the mud, and from the mouthfuls, select by means of the tongue alone, what they wish for food, rejecting other matter.

No. 3. Nighthawks and swallows have the *smallest* tongues, these birds also have the largest mouths in proportion to the size of the body. As these birds capture insects while flying and swallow them whole, taste is out of the question, and a large tongue would only be in the way.

No. 4. The English sparrow lays her first seven eggs in March setting upon them about two weeks, within a fortnight after this brood leaves the nest, a second nestful is ready, and so on until the end of September.

No. 5. Some owls lay one egg and hatch it, before laying another. The first bird hatched must "mother" the second egg and keep it warm while the real mother is searching for food. (From N. Hudson Moore.)

ENIGMA.

1, Ovenbird; 2, Quail; 3, (a) The Barn Swallow, (b) Redstart, (c) Waterthrush, (d) Chimney Swift.

EXTRACTS FROM OUR MAIL BAG.

I have observed sixty-six birds since June 1st. Most of these birds breed in this vicinity. Page 41, Vol. V, of "Birds and All Nature" tells how a Humming Bird was tamed and kept in captivity.

GEOFFREY J. GILES, Comfort, Texas.

SOME CURIOUS HOMES.

Ci-gam! Now our magic carpet bears us to the Chinese coast where at the base of the cliffs an almond-eyed Celestial waits to row us into a dark cavern on the water's edge. Here we find the nests of the edible Swifts shaped like a quartered egg she'll, fastened to the walls of the

cave. They are formed by a saliva-like secretion from two large glands beneath the Swift's tongue, and resemble a mixture of gelatine and the white of an egg. Some are of a clear white color, others, probably older nests, are a dark brown. We have not the time now to regale ourselves upon bird's nest soup, but must hasten homeward, passing on the way the playgrounds in Australia where the Bower Bird in the breeding season woos his mate with ruffled feathers in an absurd dance.

The walls of the ball room are built by the male bird of twigs and sticks. He selects a place near berry-bearing plants, which he clears of leaves and rubbish. Here he weaves an arched bower about a foot long with an opening at each end. The female birds then bring decorations for the floor, of gay feathers, and arranges about the entrance every variety of decoration,—bones, shells, glass, and bits of gay cloth. These are added to and re-arranged each day. The nests are built a short distance from these bowers.

In New Guinea we find a closely related Garden Bird which builds a cone-shaped hut of the straw-like leaves of an orchid. The leaves and blossoms of these orchids keep fresh for a long time. The birds bring green moss and cover the space before the hut, and scatter over it flowers, fruit and insects of bright colors, which they replace when faded with fresh ones. Here they go through curious dancing antics similar to those of the Bower Bird.

But we must not linger too long on foreign shores when so many wonders await us in our own land.

We should like to stop in Merrie England and search for the cunningly concealed nest of the Chaffinch.

Its thick outer walls consist of green moss, rootlets and grass interwoven with webs stolen from various insects, and covered with bits from the bark of the tree so that it seems a part of the branch on which it is placed. It is a perfectly round ball, open at the top, with a soft lining of hair, feathers and fibres.

Now we are transported across the great waters, and enter our own land by the Golden Gate to visit some California homes. Here is the beautiful purse-shaped nest of the Bush-tit, seemingly out of all proportion to the size of the tiny bird.

The bird suspends a nest nine inches in length and five inches in diameter from the branches in low thickets. The nest is composed of dried leaves of white sage, pink plant down, bits of mosses and lichens, and thickly lined with soft feathers with an entrance on the side near the top. In the upper part of the nest, the walls are thin, increasing to the thickness of one and one half inches towards the bottom.

Here, too, we may pass the nest of the Road Runner or Chapparral Cock. It is an ordinary looking affair, broad and flat, but did you notice where it is placed? In the center of a prickly bed of cactus, which affords a bulwark against danger. One may also find in the same spiny thicket, nests of the shy Cactus Wren.

In southern California we find the Arizona Hooded Oriole. These birds drill holes in the broad heavy leaves of the fan palm, with their sharp bills, and tie their nests to them by passing fibres through these holes, thus providing an umbrella to protect from sun and rain. The birds pass the fibre back and forth through the leaf to each other, one being on each side of the leaf.

Now we come to a hollow tree, where, perhaps six feet from the ground, lives the beautiful Wood Duck. Mrs. Duck does all the work in this household, and when she goes to her club she tucks the eggs up snugly in a blanket of softest down which she has plucked from her own breast. Sometimes this home is some distance from the water. Then the mother takes the duckling by the wing or back of the neck in her bill, and carries it to the water and drops it, where it seems at home at once. Many other water birds furnish their nests with downy feather beds, notably the eider, which often piles the fluffy lining so high within its seaweed nest that the eggs are hidden from view.

A PRISONER AT HOME.

While looking for nests in the spring, I saw a pair of House Wrens building a nest in a hole of a limb in an apple tree.

For several days they were as happy and busy as bees, but one day as I went by the nest the male bird seemed very much excited.

I watched him but could not see why he should scold and coax so hard. He would fly to the dead limb in which the nest was placed, and call as though calling his mate.

Seeing no enemy I looked into the hole and there was his mate on the nest, so I went my way. Two days later I paid them another visit, as I approached the nest I could hear nothing of the wrens. Upon looking into the nest I saw the female there again. I then went away to return the next day, she was still there but nothing did I see of her mate. Then I struck the tree several times with a stick, but she did not leave the nest, so I took a stick and touched her with it but she did not pick the stick nor move, so then I got a curved stick and reached back of her and pulled her to the opening, here I took hold of her and pulled her out; out she came, nest, eggs and all; because she had two of her toes caught in the horse hair which lined her nest.

She was dead and cold. I did not wonder any longer why the male was so anxious. I took the four tiny eggs which she had laid, to remember poor Jenny Wren by.

FRANK SMITH, Grand Rapids, Mich.

THE COMING OF PHOEBE.

There's a grand old river that I well know, rolling, ever rolling, from its source in northern New England hills, rolling on by meadow and hill, rolling on to the sea.

From that river can be seen, rising skyward, a towering hill covered with grand old trees.

Deep in the heart of that hill men labor daily rending from it pieces of its strong heart of stone. For near a hundred years ago have they wrought and the old strong heart yielded of its store, and boats have carried of it down the flowing river for the various uses of men.

With their strong arms wrought, they, three sturdy generations of laborers, shaping and lifting the blocks wherever the Master Mind directed.

"The old order changeth, yielding to the new," and now engines are the motive, however, which move huge wooden arms, with strong iron fingers, that, swinging here, swaying there, left the stone wherever the Master Mind shall desire, to the waiting levers.

Two men control engines twain, one grave taciturn, absolute monarch of the little shanty which covers the steel and iron helper under his control. None conversed with him save when he graciously accosted them, while his fellow engineer called gaily to the laborers and held daily counsel with the wild things whose homes were in the forest which surrounded the old stone quarry.

Lo, on a day in a sweet spring, three seasons ago, we heard a sweet voice calling softly, "Phoebe! Phoebe! Phoebe-oe-oei" from out shanty of the solitary. Who was it? What lady, what lady had dared that which no man was rash enough to do,—uninvited to invade the domain of the taciturn engineer? But the lady, (and it was a *very* tiny lady) nothing daunted settled her dress of softest tinted feathers and crooned to herself and to all whom it might concern, that she liked the place and would make it her home. And she did. The monarch of all he surveyed stepped down from his pedestal and became the devoted slave of Mistress Phoebe and the little family which came.

Only the softest tones were permitted lest the little mother be disturbed. On the days when the engine was required to use the long arm, incessantly swinging here, swaying there, the little mother was

troubled in her ministrations, and hesitated at the doorway. The de-throned one meekly taking a dish of water, with a little stick dropped a drop of water into each little wide opened mouth; this he did whenever an extra noise troubled Mistress Phoebe, till the little ones came to know him.

So for three Springtimes came the little Phoebe. After the third flying away of a little flock the sheltering shanty was pulled down.

Let it be builded again ere the coming of the Phoebe, Phoebe, Phoebe-eo-eo-eo, for when the wild things shelter near men, prosperity, plenty and Peace come also.

PHILA M. PARMELEE, Haddam, Conn.

GLEANINGS.

At home, abroad, wherever seen or heard,
Still is the Sparrow just the selfsame bird:
Thievish and clamorous, hardy, bold and base,
Unlike all others of the feathered race!
The bully of his tribe—to all beyond
The gipsy, beggar, knave and vagabond!

MARY HOWITT (1871).

The Cock-partridge, a well-travelled bird who knew the settlements and their violent perils, watched with indignant apprehension. Not without purpose had he come whirring so tumultously up the trail, a warning to the ears of all the wood-folk. His fear was lest the coming of this grey man-figure should mean an invasion of those long, black sticks which went off with smoky bang when they were pointed. He effaced himself till his brown mottled feathers were fairly one with the mottled brown bark of his perch, but his liquid eyes lost not a least movement of the stranger.

(In the Heart of the Green Woods.)

HIDDEN BIRDS.

Concealed in these sentences you will find some part of a bird.

1. What ails you Walter?
2. Is Rob ill?
3. He wishes to win goodwill from all.
4. He will be a king some day.
- 5 and 6. The old man bequeathed his many acres to his son George.
7. That is a wonderful feat, Herbert.
8. The cover to that dish is broken.

MARY TUFTS, Boston, Mass.

ENIGMAS.

Find the name of a bird in each sentence, the number of letters is indicated by the figures.

(a) Look for me flying over some broad—5—when you may know me from any other—4—by the white spot at the base of my tail.

(b) I fly in the late afternoon rather than at—5—and unlike *a*. I am not really a—4—.

(c) All the—6—was used to color my bright feathers so none was left for that little brown —4—my mate.

(d) I am often found far north of—8—and my loud clear whistle is very different from the bubbling song of the house—4—.

(e) The place to find me is an old over grown—5—, but my breast is not spotted, so do not mistake me for a song—7—.

(f) They call me—4—because my head is white, but it is as well feathered as that of my relative, the golden—5—.

ISABELLA MCC. LEMMON,
Englewood, N. J.

ENIGMA.

I am composed of 14 letters.

My 1-6-5 is to caress a dog,

My 3-4 is a preposition,

My 14-9-4 is an instrument of war,

My 5-3-13 is a metal,

My 11-9-10 is a large measure,

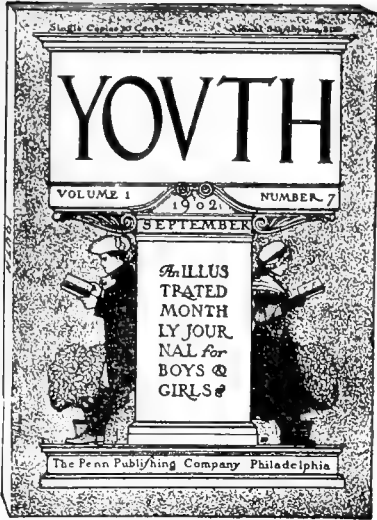
My 7-6-2-7 is what we will be some day,

My 8-12-13 is for storing grain,

My whole is a beautiful song bird of the south.

GEOFFREY J. GILES,
Comfort, Texas.

And all the throng that dwell in nests and have the gift of song,
Whose household words are songs in many keys,
Sweeter than instrument of man ere caught,
Whose habitations in the tree top even
Are half-way houses on the road to heaven.—LONGFELLOW.



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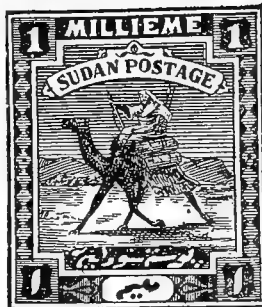
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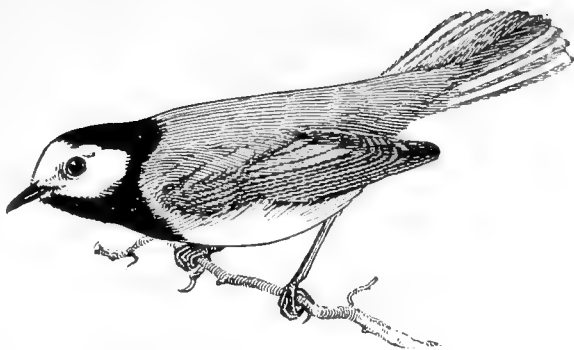
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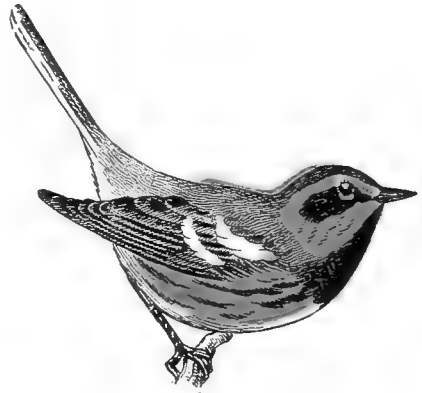
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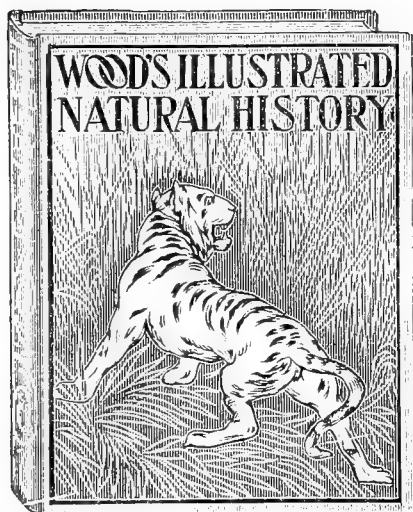
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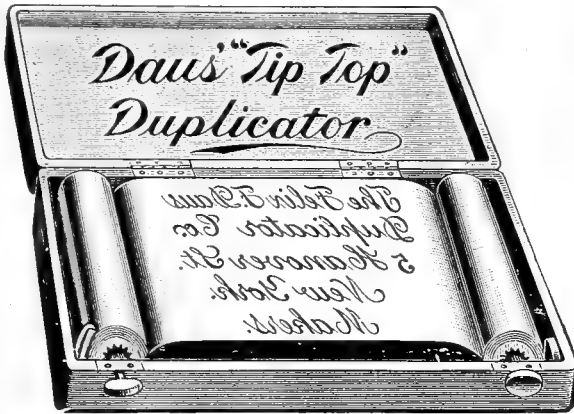
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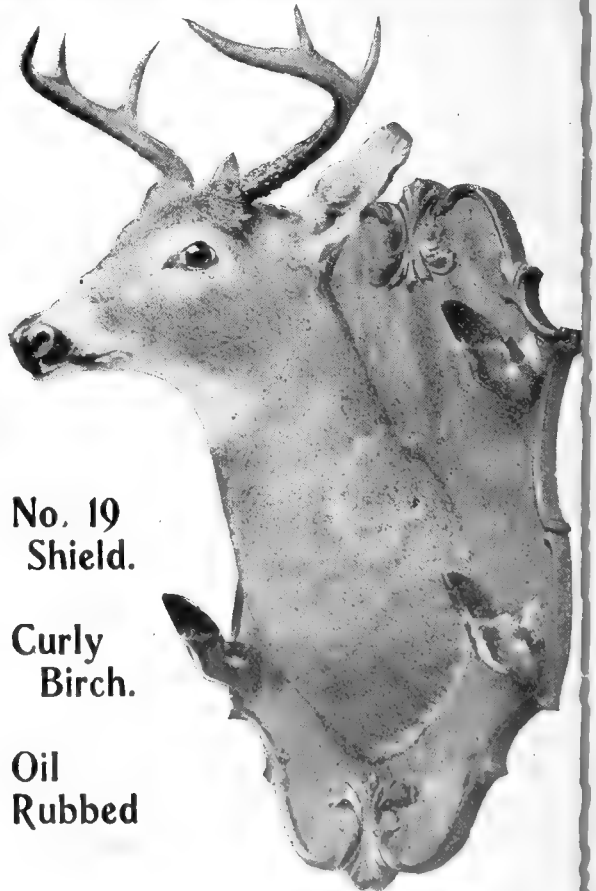
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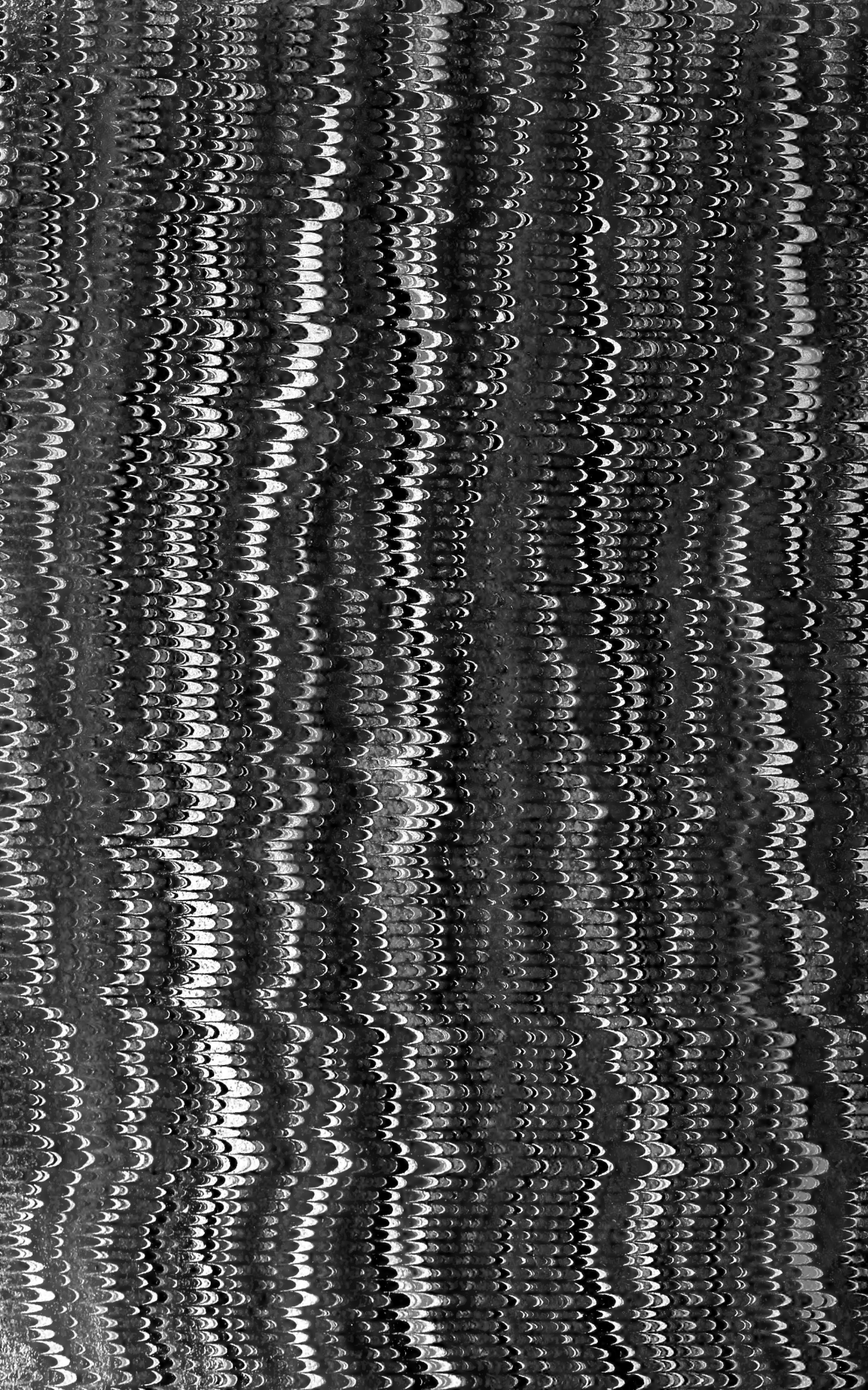
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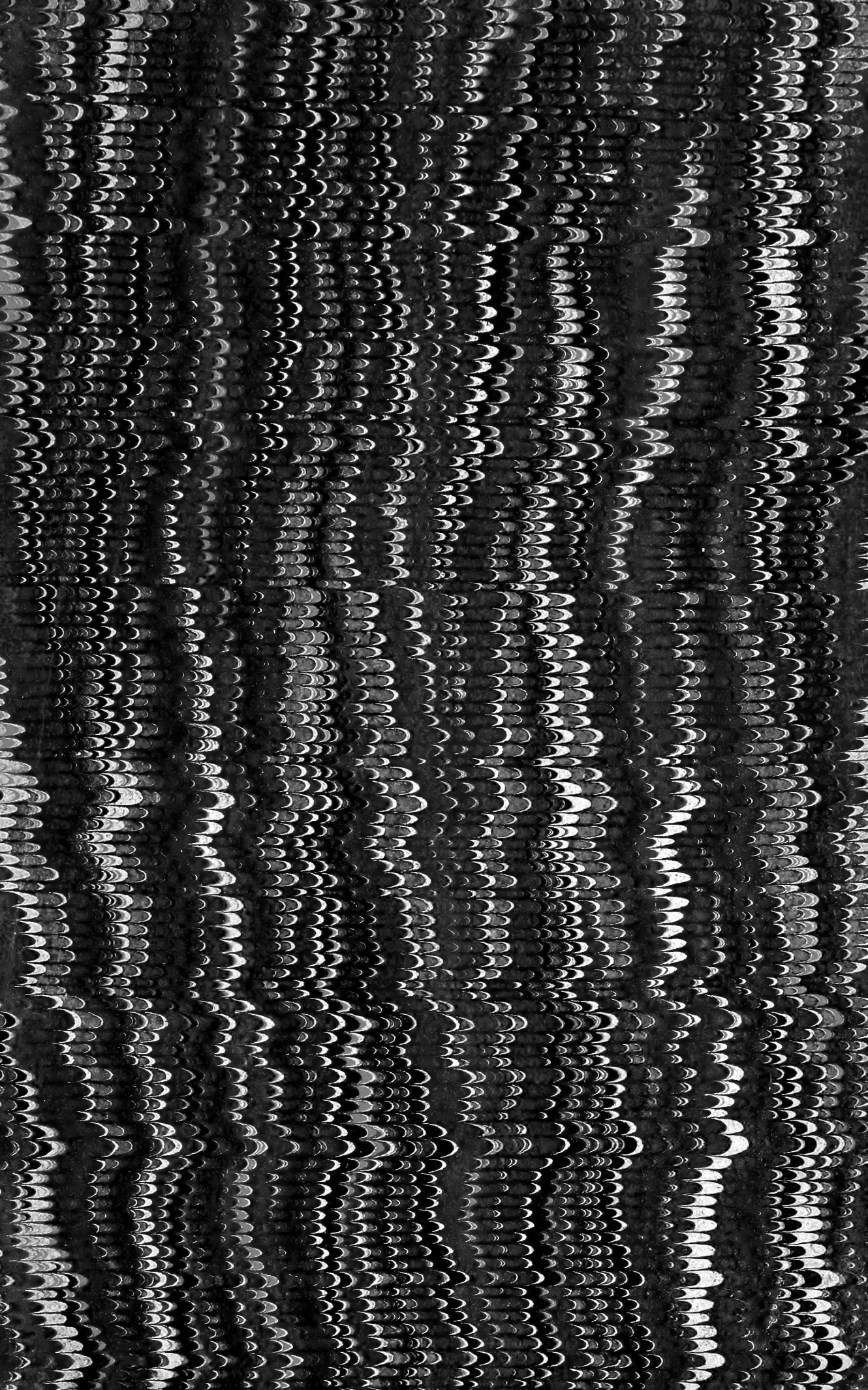




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