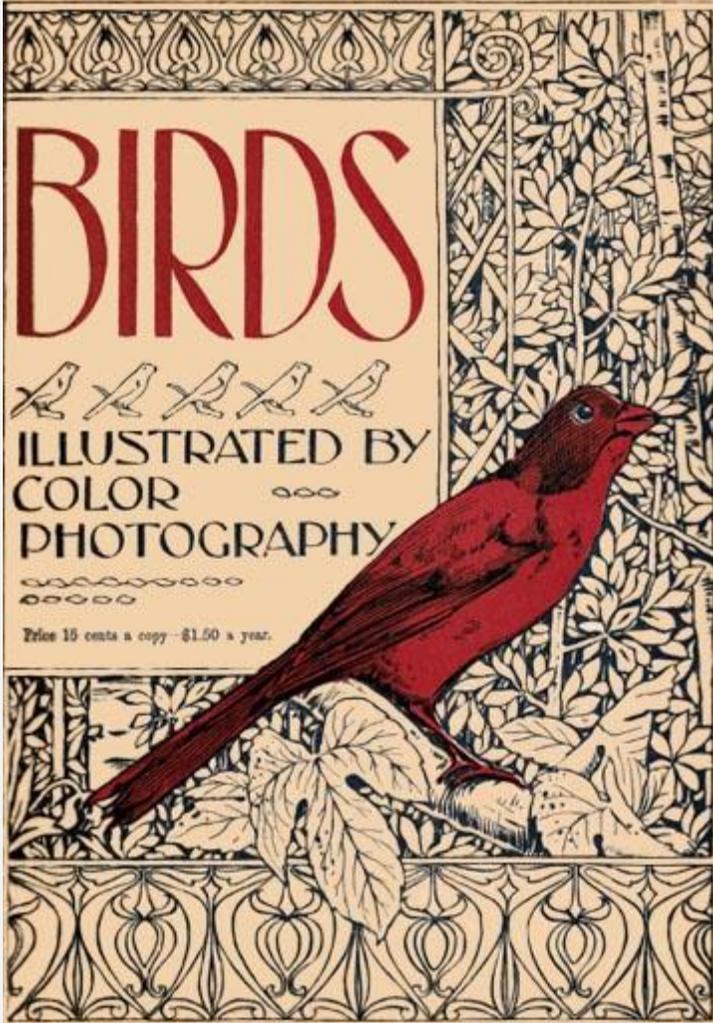


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APRIL, 1897.

No. 4.



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NATURE STUDY PUBLISHING COMPANY, CHICAGO.**

FROM THE PRESIDENT OF THE NATIONAL TEACHERS' ASSOCIATION.



*Stenographic Letter*  
Dictated by \_\_\_\_\_

*STATE OF NEW YORK*  
*Department of Public Instruction.*  
SUPERINTENDENT'S OFFICE

*Albany* December 26, 1896.

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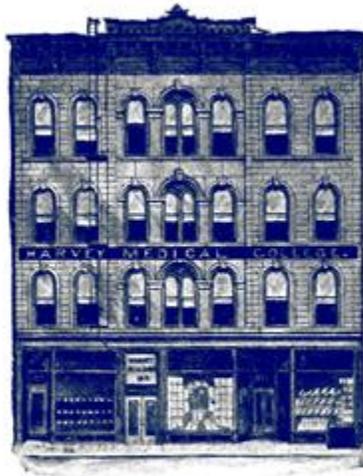
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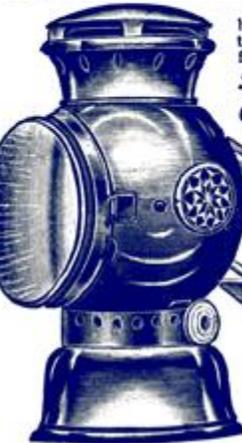
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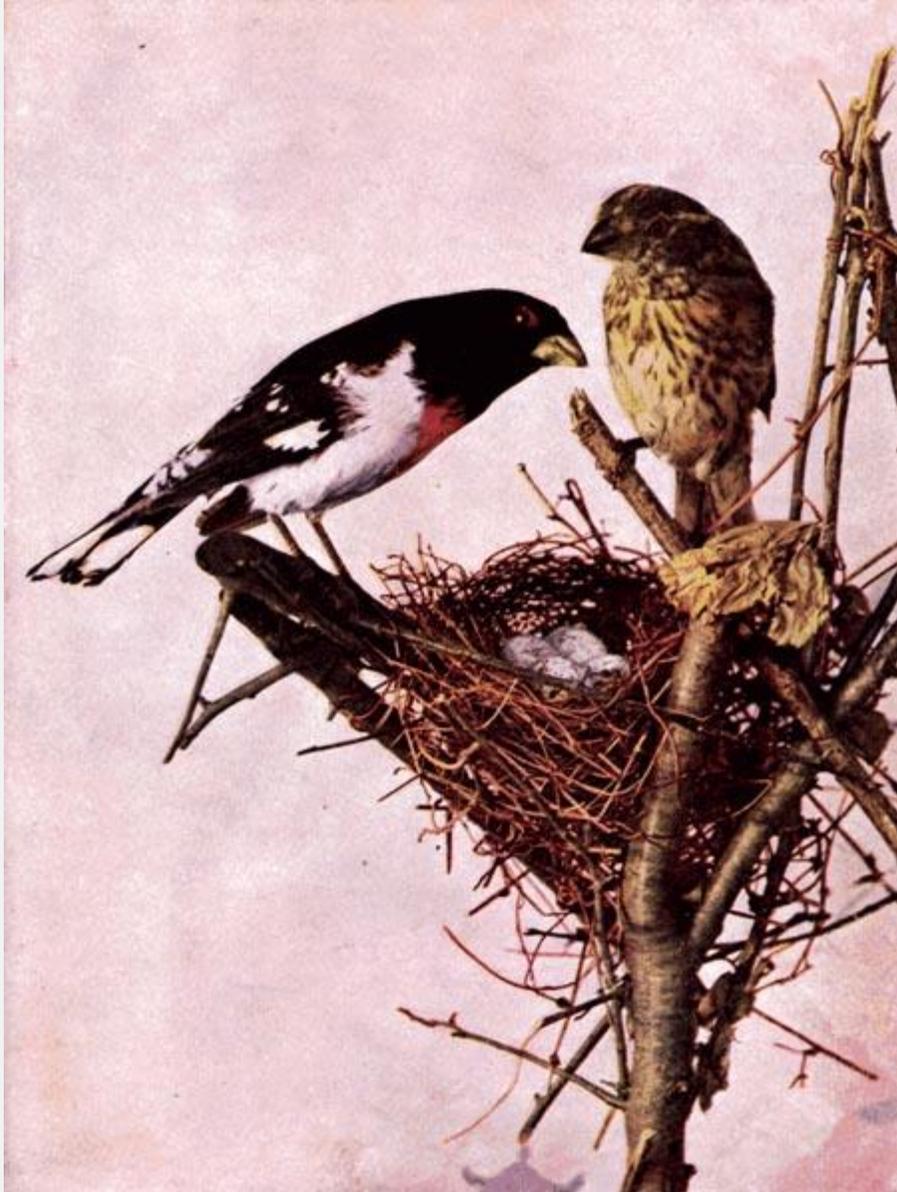
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ROSE-BREASTED

GROSBEAK.  
 $\frac{9}{16}$  Life-size.

## THE ROSE-BREASTED GROSBEAK.



HIS is an American bird, and has been described under various names by various authors. It is found in the lower parts of Pennsylvania, in the state of New York, and in New England, particularly in autumn, when the berries of the sour gum are ripe, on the kernels of which it eagerly feeds. As a singer it has few superiors. It frequently sings at night, and even all night, the notes being extremely clear and mellow. It does not acquire its full colors until at least the second spring or summer. It is found as far east as Nova Scotia, as far west as Nebraska, and winters in great numbers in Guatemala. This Grosbeak is common in southern Indiana, northern Illinois, and western Iowa. It is usually seen in open woods, on the borders of streams, but frequently sings in the deep recesses of forests. In Mr. Nuttall's opinion this species has no superior in song, except the Mocking Bird.

The Rose-Breasted Grosbeaks arrive in May and nest early in June. They build in low trees on the edges of woods, frequently in small groves on the banks of streams. The nest is coarsely built of waste stubble, fragments of leaves, and stems of plants, intermingled with and strengthened by twigs and coarser stems. It is eight inches wide, and three and a half high, with a cavity three inches in diameter and one in depth, being quite shallow for so large a nest.

Dr. Hoy, of Racine, states that on the 15th of June, within six miles of that city, he found seven nests, all within a space of not over five acres, and he was assured that each year they resort to the same locality and nest in this social manner. Six of these nests were in thorn-trees, all were within six to ten feet of the ground, near the center of the top. Three of the four parent birds sitting on the nests were males. When a nest was disturbed, all the neighboring Grosbeaks gathered and appeared equally interested.

It is frequently observed early in the month of March, making its way eastward. At this period it passes at a considerable height in the air. On the banks of the Schuylkill, early in May, it has been seen feeding on the tender buds of trees. It eats various kinds of food, such as hemp-seed, insects, grasshoppers, and crickets with peculiar relish. It eats flies and wasps, and great numbers of these pests are destroyed by its strong bill. During bright moonshiny nights the Grosbeak sings sweetly, but not loudly. In the daytime, when singing, it has the habit of vibrating its wings, in the manner of the Mocking-bird.

The male takes turns with his mate in sitting on the eggs. He is so happy when on the nest that he sings loud and long. His music is sometimes the cause of great mourning in the lovely family because it tells the egg hunter where to find the precious nest.

---

## THE CANADA JAY.

I don't believe I shall let this bird talk to you, boys and girls, for I'm afraid he will not tell you what a funny fellow he is. Isn't he a queer looking bird? See how ruffled up his feathers are. He looks as though he forgot to fix up, just as some little boys forget to comb their hair before going to school.

Well, to tell the truth, he is a very careless bird and does very funny things sometimes. He can't be trusted.

Just listen to some of the names that people give him—"Meat Bird," "Camp Robber." I think you can guess why he is called those names.

Hunters say that he is the boldest of birds, and I think they are right, for what bird would dare to go right into a tent and carry off things to eat.

A hunter thought he would play a joke on one of these birds. He had a small paper sack of crackers in the bottom of his boat. The Jay flew down, helped himself to a cracker and flew away with it to his nest. While he was gone the hunter tied up the mouth of the bag.

In a few moments the Jay was back for more. When he saw he could not get into the bag, he just picked it up and carried it off. The joke was on the hunter after all. Look at him. Doesn't he look bold enough to do such a trick?

Look back at your February number of "BIRDS" and see if he is anything like the Blue Jay.

He is not afraid of the snow and often times he and his mate have built their nest, and the eggs are laid while there is still snow on the ground. Do you know of any other birds who build their nests so early?

There is one thing about this bird which we all admire—he is always busy, never idle; so we will forgive him for his funny tricks.

---



CA

**NADA JAY.**

**From col. Chi. Acad. Sciences.**

## **THE CANADA JAY.**



ANY will recognize the Canada Jay by his local names, of which he has a large assortment. He is called by the guides and lumbermen of the Adirondack wilderness, "Whisky Jack" or "Whisky John," a corruption of the Indian name, "Wis-ka-tjon," "Moose Bird," "Camp Robber," "Hudson Bay Bird," "Caribou Bird," "Meat Bird," "Grease Bird," and "Venison Heron." To each of these names his characteristics have well entitled him.

The Canada Jay is found only in the more northern parts of the United States, where it is a resident and breeds. In northern Maine and northern Minnesota it is most common; and it ranges northward through the Dominion of Canada to the western shores of Hudson Bay, and to the limit of timber within the Arctic Circle east of the Rocky Mountains.

Mr. Manly Hardy, in a special bulletin of the Smithsonian Institution, says, "They are the boldest of our birds, except the Chickadee, and in cool impudence far surpass all others. They will enter the tents, and often alight on the bow of a canoe, where the paddle at every stroke comes within eighteen inches of them. I know nothing which can be eaten that they will not take, and I had one steal all my candles, pulling them out endwise, one by one, from a piece of birch bark in which they were rolled, and another pecked a large hole in a keg of castile soap. A duck which I had picked and laid down for a few minutes had the entire breast eaten out by one or more of these birds. I have seen one alight in the middle of my canoe and peck away at the carcass of a beaver I had skinned. They often spoil deer saddles by pecking into them near the kidneys. They do great damage to the trappers by stealing the bait from traps set for martens and minks, and by eating trapped game. They will sit quietly and see you build a log trap and bait it, and then, almost before your back is turned, you hear their hateful "Ca-ca-ca," as they glide down and peer into it. They will work steadily, carrying off meat and hiding it. I have thrown out pieces, and watched one to see how much he would carry off. He flew across a wide stream and in a short time looked as bloody as a butcher from carrying large pieces; but his patience held out longer than mine. I think one would work as long as Mark Twain's California Jay did trying to fill a miner's cabin with acorns through a knot hole in the roof. They are fond of the berries of the mountain ash, and, in fact, few things come amiss; I believe they do not possess a single good quality except industry."

Its flight is slow and laborious, while it moves on the ground and in trees with a quickness and freedom equal to that of our better known Bluejay.

The nesting season begins early, before the snow has disappeared, and therefore comparatively little is known about its breeding habits. It is then silent and retiring and is seldom seen or heard. The nest is quite large, made of twigs, fibres, willow bark, and the down of the cottonwood tree, and lined with finer material. The eggs, so far as is known, number three or four. They are of a pale gray color, flecked and spotted over the surface with brown, slate gray, and lavender.

---

## **THE PURPLE GALLINULE.**



PURPLE Gallinules are found in the South Atlantic and Gulf States, and casually northward as far as Maine, New York, Wisconsin, and south throughout the West Indies, Mexico, Central America, and northern South America to Brazil. The bird pictured was caught in the streets of Galveston, Texas, and presented to Mr. F. M. Woodruff, of the Chicago Academy of Sciences. Gallinules live in marshy districts, and some of them might even be called water-fowls. They usually prefer sedgy lakes, large swampy morasses and brooks, or ponds and rivers well stocked with vegetation. They are not social in disposition, but show attachment to any locality of which they have taken possession, driving away other birds much larger and stronger than themselves. They are tenderly attached to their little ones and show great affection for each other. The nest is always built among, or near the water plants of which they are fond. It is about eight inches thick and fifteen to eighteen inches in diameter, and is placed from a foot to two feet out of water among the heavy rushes. The Purple Gallinule is known to build as many as five or six sham nests, a trait which is not confined to the Wren family. From four to twelve smooth shelled and spotted eggs are laid, and the nestlings when first hatched are clad in dark colored down. On leaving the nest they, accompanied by their parents, seek a more favorable situation until after the moulting season. Half fluttering and half running, they are able to make their way over a floating surface of water-plants. They also swim with facility, as they are aquatic, having swimming membranes on their feet, and while vegetable feeders to some extent, they dive for food. It is noted that some Gallinules, when young, crawl on bushes by wing claws. The voice somewhat resembles the cackling or clucking of a hen. It eats the tender shoots of young corn, grass, and various kinds of grain. When the breeding season approaches, the mated pairs generally resort to rice fields, concealing themselves among the reeds and rushes. Mr. Woodruff noted that when the railway trains pass through the over-flowed districts about Galveston, the birds fly up along the track in large multitudes.

The Purple Gallinules are stoutly built birds, with a high and strong bill, and their remarkably long toes, which enable them to walk readily over the water plants, are frequently employed to hold the food, very much in the manner of a parrot, while eating.

O, purple-breasted Gallinule  
Why should thy beauty cause thee fear?  
Why should the huntsman seek to fool  
Thy innocence, and bring thee near  
His deadly tool of fire and lead?  
Thou holdest high thy stately head!

Would that the hunter might consent  
To leave thee in thy sweet content.—C. C. M.



PURPLE GALLINULE.

From col. F. M. Woodruff.

---



SM

**ITH'S LONGSPUR.**

From col. F. M. Woodruff.

**SMITH'S PAINTED LONGSPUR.**



MITH'S Painted Longspur is usually considered a rare bird in the middle west, but a recent observer found it very common in the fields. He saw twenty-five on October 3rd of last year. They were associated with a large flock of Lapland Longspurs. On account of its general resemblance to the latter species it is often overlooked. It is found in the interior of North America from the Arctic coast to Illinois and Texas, breeding far north, where it has a thick, fur-lined, grass nest, set in moss on the ground. Like the Lapland Longspur, it is only a winter visitor. It is not so generally distributed as that species, the migrations being wholly confined to the open prairie districts. Painted Longspurs are

generally found in large flocks, and when once on the ground begin to sport. They run very nimbly, and when they arise utter a sharp click, repeated several times in quick succession, and move with an easy undulating motion for a short distance, when they alight very suddenly, seeming to fall perpendicularly several feet to the ground. They prefer the roots where the grass is shortest. When in the air they fly in circles, to and fro, for a few minutes, and then alight, keeping up a constant chirping or call. They seem to prefer the wet portions of the prairie. In the breeding seasons the Longspur's song has much of charm, and is uttered like the Skylark's while soaring. The Longspur is a ground feeder, and the mark of his long hind claw, or spur, can often be seen in the new snow. In 1888 the writer saw a considerable flock of Painted Longspurs feeding along the Niagara river near Fort Erie, Canada.

The usual number of eggs found in a nest is four or five, and the nests, for the most part, are built of fine dry grasses, carefully arranged and lined with down, feathers, or finer materials similar to those of the outer portions. They are sometimes sunk in an excavation made by the birds, or in a tuft of grass, and in one instance, placed in the midst of a bed of Labrador tea. When the nest is approached, the female quietly slips off, while the male bird may be seen hopping or flying from tree to tree in the neighborhood of the nest and doing all he can to induce intruders to withdraw from the neighborhood. The eggs have a light clay-colored ground, marked with obscure blotches of lavender and darker lines, dots, and blotches of purplish brown. The Longspur is a strong flier, and seems to delight in breasting the strongest gales, when all the other birds appear to move with difficulty, and to keep themselves concealed among the grass. While the colors of adult males are very different in the Longspur family, the females have a decided resemblance. The markings of the male are faintly indicated, but the black and buff are wanting.

---

## THE AMERICAN CROSS BILL.



AMERICAN CROSSBILLS are notable for their small size, being considered and described as dwarfs of the family. Their food consists exclusively of pine, fir, and larch, which accounts for the fact that they are more numerous in Northern latitudes where these trees abound. When the cones are abundant they visit in great numbers many

places where they have not been for years, appearing at irregular intervals, and not confining themselves to particular localities.

They are very social even during the nesting season. Their nests are built among the branches of the fir trees, and there they disport themselves gaily, climbing nimbly, and assisting their movements, as parrots do, with their beaks. They will hang downward for minutes clinging to a twig or cone, seeming to enjoy this apparently uncomfortable position. They fly rapidly, but never to a great distance. "The pleasure they experience in the society of their mates is often displayed by fluttering over the tops of the trees as they sing, after which they hover for a time, and then sink slowly to their perch. In the day time they are generally in motion, with the exception of a short time at noon. During the spring, summer and autumn they pass their time in flying from one plantation to another."

The Crossbill troubles itself but little about the other inhabitants of the woods, and is said to be almost fearless of man. Should the male lose his mate, he will remain sorrowfully perched upon the branch from which his little companion has fallen; again and again visit the spot in the hope of finding her; indeed it is only after repeated proofs that she will never return that he begins to show any symptoms of shyness.

In feeding the Crossbill perches upon a cone with its head downwards, or lays the cone upon a branch and stands upon it, holding it fast with his sharp, strong pointed claws. Sometimes it will bite off a cone and carry it to a neighboring bough, or to another tree where it can be opened, for a suitable spot is not to be found on every branch.

The nest is formed of pine twigs, lined with feathers, soft grass, and the needle-like leaves of the fir tree. Three or four eggs of a grayish or bluish white color, streaked with faint blood red, reddish brown, or bluish brown spots, are generally laid.

The following poem is quite a favorite among bird lovers, and is one of those quaint legends that will never die.

---

## THE LEGEND OF THE CROSSBILL.

From the German of Julius Mosen, by Longfellow.

On the cross the dying Saviour  
Heavenward lifts his eyelids calm,  
Feels, but scarcely feels, a trembling  
In his pierced and bleeding palm.

And by all the world forsaken,  
Sees he how with zealous care  
At the ruthless nail of iron  
A little bird is striving there.

Stained with blood and never  
tiring,  
With its beak it doth not cease,  
From the cross it would free the  
Saviour,  
Its Creator's son release.

And the Saviour speaks in  
mildness:  
"Blest be thou of all the good!  
Bear, as token of this moment,  
Marks of blood and holy rood!"

And that bird is called the Crossbill,  
Covered all with blood so clear,  
In the groves of pine it singeth,  
Songs, like legends, strange to hear.



AMERICAN RED CROSSBILL.

From col. F. M. Woodruff.

---

**BIRD DAY IN THE SCHOOLS.**

**B**

IRD DAY! Have you heard of it? Whether you have or not, we wish to assure you that it is worthy the thoughtful consideration of all teachers, and of all others interested in protecting and preserving our sweet birds.

Bird day has already proved a great success in two cities of the United States, both in the enthusiasm shown by the children in their friendly study of birds and in the result of such study.

In 1894, Oil City, Pa., observed the day, and in 1896 it was celebrated in the schools of Fort Madison, Iowa.

Of the results in his schools, Supt. Babcock, of Oil City, says, "There has been a complete change in the relations existing between the small boy and the birds."

Although we in Fort Madison have been engaged in bird study less than a year, and have observed but one BIRD DAY, results similar to those secured by Supt. Babcock are becoming manifest. Only a few days ago a boy said to his teacher, "I used to take pleasure in killing all kinds of birds. Now I don't wish to harm even an English Sparrow."

The object of BIRD DAY and the study that leads to it, is to diffuse a true knowledge of the aesthetic and practical value of birds and to arouse an interest in bird protection.

And it is high time that something be done. From all over the country come reports of a decrease in native birds. In many places some of our sweetest songsters and most useful insect destroyers have become very scarce or have disappeared entirely. The causes are many, but the greatest is an inexcusable thoughtlessness on the part of young and old of both sexes. Johnny teases for a gun. His fond parents get it for him. Result—Johnny shows his marksmanship by shooting several birds in his vicinity. Or, perhaps, the ladies need new hats. Nothing except birds for trimming will do, though ten thousand sweet songs be hushed forever.

The study of bird life is one of especial interest to children and if properly pursued will develop in them sympathetic characters that should make them kinder towards their playmates now and towards their fellow-men in the coming years.

Impress upon a child that

"He liveth best who loveth best  
All things, both great and small,"

and you have built into his life something that shall shine forth in good deeds through countless ages.

And how go about this work? The limit of space allotted this article forbids a full answer. Briefly,—study the birds themselves. Get a boy aroused to a friendly, protective

interest in one bird and you have probably made that boy a friend of all birds. If you are a teacher, take your little flock out early some bright, Spring morning and let them listen to

[Continued on page [138](#).]

---

## **THE CALIFORNIA WOODPECKER.**

I may not be as pretty a bird as my red-headed cousin but I'm just as busy. My home is in the west among the pines on the mountains. I do not visit the east at all.

Of course I like insects and fruits just as my relations do, but I like best to eat acorns. You know, if I left the acorns on the trees and just got enough to eat at one time, after a while I would have a hard time finding any. They would drop off and roll away and get lost among the leaves and grasses. What would you do if you were I?

I have a very sharp bill, you see. So I can peck and peck at the tree until I have made a hole which will hold an acorn. Sometimes I fill my store house quite full in this way. You can see how they look in the picture. When I want to get at the meat in the acorn I drive the nut into a crack and split the shell. Then I have my breakfast easily enough.

Some of the other birds like acorns too—but I think they should find and store away their own and not try to take mine. I do not like to quarrel and so have many friends.

Then I have my nest to look after. I make it as my cousin does, by digging into a tree, first a passage way or hall—then a living-room. There are the four or five white eggs and there too soon are the little baby-birds to be taken care of. Now, have I not a great deal of work? Do you not think I am quite as busy as my cousin?

---



CALIFORNIA WOODPECKER.

From col. Chi. Acad. Sciences.

## THE CALIFORNIA WOODPECKER.



HIS fine specimen of the Woodpecker is by far the most sociable representative of the family in the United States, and it is no unusual occurrence to see half a dozen or more

in a single tree. It is also a well disposed bird, and seldom quarrels or fights with its own kind, or with smaller birds, but it attacks intruders on its winter stores with such vigor and persistence that they are compelled to vacate the premises in a hurry. Its manner of flight and call notes closely resemble those of the Red-Headed Woodpecker, and, like it, it loves to cling to some dead limb near the top of a tree and drum for hours at a time. It is one of the most restless of birds, and never appears to be at a loss for amusement, and no other bird belonging to this family could possibly be more industrious.

During the Spring and Summer its food consists, to some extent, of insects, including grasshoppers, ants, beetles, and flies—varied with cherries, apples, figs, berries and green corn. Acorns form its principal food during the greater portion of the year. Of these it stores away large numbers in the thick bark of pines, in partly rotten limbs of oak trees, telegraph poles, and fence posts. A writer in the "Auk" says of its habits: "It is essentially a bird of the pines, only occasionally descending to the cotton woods of low valleys. The oaks, which are scattered through the lower pine zone, supply a large share of its food. Its habit of hoarding food is well known, and these stores are the source of unending quarrels with its numerous feathered enemies. I have laid its supplies under contribution myself, when short of provisions and lost from the command on which I had been traveling, by filling my saddlebags with half-dried acorns from under the loose bark of a dead pine."

The California Woodpecker is found in western Mexico, northern Lower California, and north through California into western Oregon. So far as is known the eastern limit of its range is the Santa Fe Mountains.

Its nest is usually from fifteen to twenty-five feet from the ground, excavated on the side of a branch of a good sized oak or sycamore. Breeding commences in April or May, according to locality. Both sexes assist in the excavation. The entrance hole is about one and three-fourths inches in diameter, perfectly circular, and is sometimes chiseled through two or three inches of solid wood before the softer and decayed core is reached. The inner cavity is greatly enlarged as it descends, and varies from eight to twenty-four inches in depth. The eggs rarely exceed four or five, and are pure white in color.

The most remarkable fact concerning this species is the peculiar manner in which it stores acorns. The thick bark of large sugar and other pines has been seen completely riddled with small holes. A section of a partly decayed oak limb, three feet two inches long and five and one-half inches in diameter, contained 255 holes. Each hole is intended to hold a single acorn. The acorns fit quite accurately, are driven in point foremost, and are not readily extracted. Sweet acorns are selected. To get at their contents the acorns are carried to a convenient tree where a limb has been broken off, driven into a suitable crevice, split open, and the outer hull removed. Truly the

California Woodpecker is no idler or bungler, nor is he a free-booter, like the noisy, roystering Jay. He makes an honest living, and provides for the evil day which comes alike to man and beast.

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## **THE PIEDBILL GREBE.**

Boys and Girls:

This is the first time I've been on land for several weeks. I am sure you can't think of any other kind of bird who can say that.

Sometimes I don't go on land for months, but stay in the water all of the time—eat and sleep there, floating around.

My little chick wanted me to go on land so we could have our pictures taken.

If he were not sitting so close to me you could see better what paddles I have for feet.

I build my nest of weeds, grass, sticks, and anything I can find floating around. I most always fasten it to some reeds or tall grass that grow up out of the water.

In this I lay the eggs and just as soon as the chicks come out of the shell they can swim. Of course they can't swim as well as I and they soon get tired. Do you know how I rest them?

Well, it's very funny, but I just help them up on my back and there they rest while I swim around and get them food. When they get rested they slide off into the water.

Are you wondering if I can fly? Well, I can fly a little but not very well. I can get along very fast swimming, and as I do not go on land often, why should I care to fly.

Should any one try to harm me I can dive, and swim under water out of reach.

Well, chick, let us go back to our home in the water.

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PIED BILLED GREBE.

From col. F. M. Woodruff.

## THE PIEDBILL GREBE.



MEMBERS of the family of Grebes are to be found in the temperate zones of both hemispheres, beyond which they do not extend very far either to the north or south.

They are usually found on ponds or large sheets of stagnant water, sometimes on deep, slow-moving streams; but always where sedges and rushes are abundant. Probably there are no birds better entitled to the name of water fowl than the Grebes—at least, observers state that they know of no others that do not on some occasions appear on dry land. It is only under the most urgent circumstances, as, for instance, when wounded, that they approach the shore, and even then they keep so close to the brink that on the slightest alarm they can at once plunge into the water. Whatever they do must be done in the water; they cannot even rise upon the wing without a preliminary rush over the surface of the lake. From dry land they cannot begin their flight. Their whole life is spent in swimming and diving. They even repose floating upon the water, and when thus asleep float as buoyantly as if they were made of cork, the legs raised to the edges of the wings, and the head comfortably buried among the feathers between the back and shoulder. Should a storm arise, they at once turn to face the blast, and are usually able, with their paddle-like feet, to maintain themselves in the same place. They dive with great facility, and make their way more swiftly when under water than when swimming at the top. When flying the long neck is stretched out straight forwards and the feet backwards. In the absence of any tail, they steer their course by means of their feet. When alarmed they instantly dive.

Their food consists of small fishes, insects, frogs, and tadpoles. Grebes are peculiar in their manner of breeding. They live in pairs, and are very affectionate, keeping in each other's company during their migrations, and always returning together to the same pond. The nest is a floating one, a mass of wet weeds, in which the eggs are not only kept damp, but in the water. The weeds used in building the nests are procured by diving, and put together so as to resemble a floating heap of rubbish, and fastened to some old upright reeds. The eggs are from three to six, at first greenish white in color, but soon become dirty, and are then of a yellowish red or olive-brown tint, sometimes marbled.

The male and female both sit upon the nest, and the young are hatched in three weeks. From the first moment they are able to swim, and in a few days to dive. Having once quitted the nest they seldom return to it, a comfortable resting and sleeping place being afforded them on the backs of their parents. "It is a treat to watch the little family as now one, now another of the young brood, tired with the exertion of swimming or of struggling against the rippling water, mount as to a resting place on their mother's back; to see how gently, when they have recovered their strength, she returns them to the water; to hear the anxious, plaintive notes of the little warblers when they have ventured too far from the nest; to see their food laid before them by the old birds; or to witness the tenderness with which they are taught to dive."

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## BIRD DAY IN THE SCHOOLS—Continued from page [129](#).

the singing of their feathered brothers of the air. Call attention to their beauty and grace of form, plumage and movement. Watch them care for their little ones. Notice their nests—their happy little homes—those “halfway houses on the road to heaven,” and as you and your flock wander, watch and listen and call to mind that,

“’Tis always morning somewhere, and above  
The awakening continents, from shore to shore,  
Somewhere the birds are singing evermore.”

Let us, fellow teachers and fellow citizens of America, take up this work of bird study and bird protection. Let the schools teach it, the press print it, and the pulpit preach it, till from thousands of happy throats shall be proclaimed the glad tidings of good will of man towards the birds.

C.  
*Supt.*

Fort Madison, Iowa.

H.  
*of*

MORRILL,  
*Schools.*

---

We are in receipt almost daily of letter inquiries for good literature on birds, and suitable exercises for Bird Day Programs.

It will be our purpose from time to time to suggest good works by the best authors.

We give below a list of publications that are especially fine, and shall be pleased to supply them at the list price, as indicated, or as premiums for subscribers to “BIRDS.”

“**Birds Through an Opera Glass,**” 75 cents, or two subscriptions.  
“**Bird Ways,**” 60 cents, or two subscriptions.  
“**In Nesting Time,**” \$1.25, or three subscriptions.  
“**A Bird Lover of the West,**” \$1.25, or three subscriptions.  
“**Upon the Tree Tops,**” \$1.25, or three subscriptions.  
“**Wake Robin,**” \$1.00, or three subscriptions.  
“**Birds in the Bush,**” \$1.25, or three subscriptions.  
“**A-Birding on a Bronco,**” \$1.25, or three subscriptions.  
“**Land Birds and Game Birds of New England,**” \$3.50, or eight subscriptions.  
“**Birds and Poets,**” \$1.25, or three subscriptions.  
“**Bird Craft.**”

**“The Story of Birds,”** 75 cents, or two subscriptions.  
**“Hand Book of Birds of Eastern North America,”** \$3.00, or seven subscriptions.

In numbers 70, 63, 4, 28 and 54 of the Riverside Series, published by Houghton, Mifflin & Co, may be found selections appropriate for Bird Day Programs, and in the “Intelligence,” of April 1, published by E. O. Vaile, Oak Park, Illinois, may be found some interesting exercises for Bird Day Programs. Copies of the paper may be obtained at eight cents.

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**BOHEMIAN WAX-WING.**

From col. F. M. Woodruff.

## **THE BOHEMIAN WAX-WING.**



THE Bohemian Wax-wing is interesting for its gipsy-like wanderings, one winter visiting one country, next season another, often in enormous flocks, and usually with intervals

of many years, so that in former times their appearance was regarded as sure forebodings of war and pestilence, their arrival being dreaded as much as that of a comet. Another interesting feature of its history is the fact that for a long time this familiar bird eluded the search of the zoologist. Its breeding habits, and even the place where it breeds, were unknown thirty years ago, until finally discovered by Mr. Wolley in Lapland, after a diligent search during four summers. It is also called the European or Common Silk-tail, and is an inhabitant both of northern Europe and of North America, though in America the Cedar Bird is more often met with. In the northern portions of Europe, birch and pine forests constitute its favorite retreats, and these it seldom quits, except when driven by unusual severity of weather, or by heavy falls of snow, to seek refuge in more southern provinces. It is said that even in Russia, Poland, and southern Scandinavia it is constantly to be seen throughout the entire winter; that indeed, so rarely does it wander to more southern latitudes, that in Germany it is popularly supposed to make its appearance once in seven years. On the occasion of these rare migrations, the Silk-tails keep together in large flocks, and remain in any place that affords them suitable food until the supply is exhausted.

These birds are heavy and indolent, exerting themselves rarely except to satisfy hunger. They live in perfect harmony, and during their migrations indicate no fear of man, seeking their food in the streets of the villages and towns. They frequently settle in the trees, remaining almost motionless for hours together. Their flight is light and graceful, but on the ground they move with difficulty. Their call note is a hissing, twittering sound. In summer, insects are their chief food, while in winter they live principally on berries. The Wax-wing will devour in the course of twenty-four hours an amount of food equal to the weight of its own body. In Lapland is the favorite nesting ground of the Bohemian Wax-wing. The nests are deeply hidden among the boughs of pine trees, at no great height from the ground; their walls are formed of dry twigs and scraps from the surrounding branches, and the cavities are wide, deep, and lined with blades of grass and feathers. There are five eggs, laid about the middle of June; the shell is bluish or purplish white, sprinkled with brown, black, or violet spots and streaks, some of which take the form of a wreath at the broad end. The exquisite daintiness and softness of the Wax-wing's coat can be compared only to floss silk.

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## THE MARSH WREN.

With tail up, and head up,  
The Wren begins to sing;  
He fills the air with melody,

And makes the alders ring;  
We listen to his cadences,  
We watch his frisky motions,  
We think—his mate attending him—  
He's got some nesting notions.—C. C. M.



HESE Wrens inhabit marshy and weedy bottom lands along river courses, and have all the brisk manners and habits of the family. This species, however, has a peculiar habit of building several nests every season, and it is suggested that these are built to procure protection for the female, in order that when search is made for the nest where she is sitting, the male may lure the hunter to an empty nest.

Its song is not unlike that of the House Wren, though less agreeable. It is a summer resident, arriving in May and departing in September. Its nest, which is found along borders of rivers, is made of sedge and grasses suspended near tall reeds. It has been found hanging over a small stream, suspended from the drooping bough of an alder tree, swayed to and fro by every breath of air. A careful observer states that a Wren will forsake her nest when building it, sooner than any other bird known to him. Disturb her repeatedly when building and she leaves it apparently without cause; insert your fingers in her tenement and she will leave it forever. But when the eggs are laid, the Wren will seldom abandon her treasure, and when her tender brood are depending on her for food, she will never forsake them, even though the young be handled, or the female bird be caught on the nest while feeding them. The food of the Wren is insects, their larvae and eggs, and fruit in season.

This Wren has justly been called a perennial songster. "In Spring the love-song of the Wren sounds through the forest glades and hedges, as the buds are expanding into foliage and his mate is seeking a site for a cave-like home. And what a series of jerks it is composed of, and how abruptly he finishes his song, as if suddenly alarmed; but this is his peculiar habit and common to him alone. In summer we hear his song morning, noon, and night, go forth for very joyfulness, as he wanders hither and thither in his leafy bower." It is only in the moulting season that he does not sing.

A lady who used to attract a great number of birds to her garden with crumbs, seeds, and other dainties, said that when the weather became cold the Wrens used to gather upon a large branch of a tree, about four inches beneath another branch. They assembled there in the evening and packed themselves very comfortably for the night, three or four deep, apparently for the sake of warmth, the topmost Wren always having his back

pressed against the outer branch as if to keep all steady. Pitying their forlorn condition, she provided a bedroom for them—a square box lined with flannel, and with a very small round hole for a door. This was fastened to the branch, and the birds promptly took possession of it, their numbers increasing nightly, until at least forty Wrens crowded into the box which did not seem to afford room for half the number. When thus assembled they became so drowsy as to permit themselves to be gently handled.



LONG-BILLED MARSH

WREN.

From col. Chi. Acad. Sciences.

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## **THE MARSH WRENS.**

A happier pair of birds than these little Wrens it would be hard to find.

They have just come up from taking their morning bath and are going to sing a while before going to work on their nests.

You see I say nests. That is a strange thing about the Wrens, they build several nests. I wonder if you can tell why they do this. If you can't, ask your teacher about it.

It is a little too early in the season or I would have one of the nests in the picture for you to look at.

I will try to describe it to you, so that you will know it when you see it. These little Wrens make their nests of coarse grasses, reed stalks, and such things, lined with fine grasses. It is round like a ball, or nearly so, and has the opening in the side. They fasten them to the reeds and bushes.

If you wish to get acquainted with these birds, you must visit the tall grasses and cat-tails along rivers and creeks and in marshes.

You won't have to let them know that you are coming; they will see you long before you see them, and from their little nests they will begin to scold you, for fear that you mean to do them harm.

When they see that you mean them no harm, they will begin to entertain you with their songs. Oh, how they do sing! It just seems as though they would burst with song.

You can see how happy the one is in the picture. The other little fellow will soon take his turn. See how straight he holds his tail up. Find out all you can about these Wrens. You notice they have long bills. We call them Long-billed Marsh Wrens. There are several other kinds. You surely must have seen their cousins, the House Wrens. I will show you their pictures some day.

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## **THE ARIZONA GREEN JAY.**



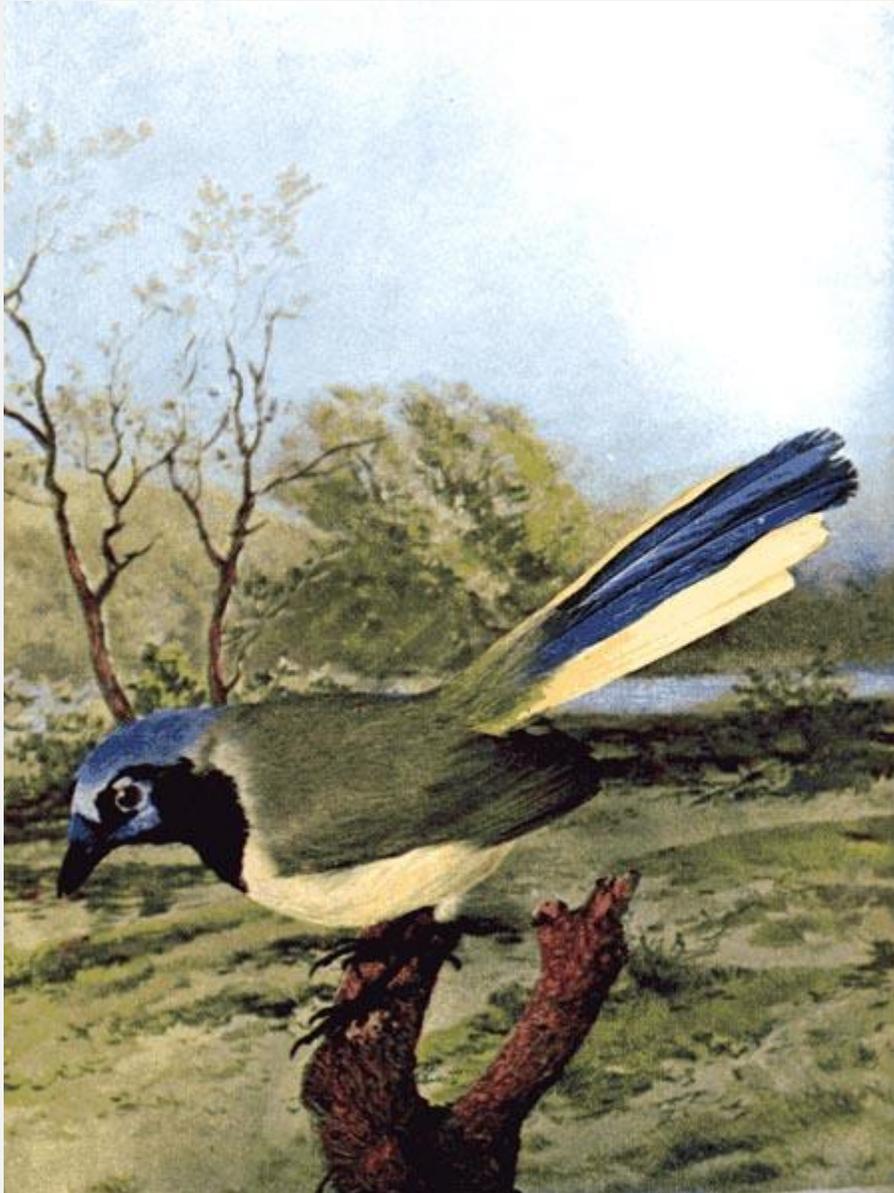
THE geographical range of the Arizona Jay is in southern New Mexico and Arizona and south into Sonora and Chihuahua, Mexico. It is a common resident throughout the oak belt which generally fringes the foothills of the mountains and ranges well up among the pines. In suitable localities it is very abundant. It is rarely seen at any distance out of the arid plains; but after the breeding season is over, small flocks are sometimes met with among the shrubbery of the few water courses, several miles away from their regular habitat. They are seen in the early Spring, evidently on a raid for eggs and the young of smaller birds. On such occasions they are very silent, and their presence is only betrayed by the scoldings they receive from other birds. On their own heath they are as noisy as any of our Jays, and apparently far more sociable, a number of pairs frequently nesting close to each other in a small oak grove. They move about in small family parties of from half a dozen to twenty or thirty, being rarely seen alone. They are restless, constantly on the move, prying into this or that, spending a good portion of their time on the ground, now hopping on a low limb, and the next minute down again, twitching their tails almost constantly. Their call notes are harsh and far reaching, and are somewhat similar to those of the California Jay.

The voices of animals have a family character not easily mistaken, and this similarity is especially observable in birds. As Agassiz says, “Compare all the sweet warbles of the songster family—the nightingales, the thrushes, the mocking birds, the robins; they differ in the greater or lesser perfection of their note, but the same kind of voice runs through the whole group. Does not every member of the Crow family caw, whether it be a Jackdaw, the Jay, or the Magpie, the Rook in some green rookery of the Old World, or the Crow of our woods, with its long melancholy caw that seems to make the silence and solitude deeper?”

The habits of the Arizona Jay are similar to those of its brethren. Its food consists of grasshoppers, insects, animal matter, wild fruits, seeds, and especially acorns. It flies by partly closing its wings, darting suddenly down, then up again, and repeating these movements for some time. It mates about the end of February. The nest, composed of dry rootlets laid very closely in rings, is usually found in an oak sapling about ten feet from the ground. The inside diameter is five inches, and depth one and three-fourths inches. It is like a deep saucer.

The Arizona Jay is considered a foothill bird, not going far into the pines and not appearing on the plains. But one brood appears to be raised in a season, and nesting lasts about sixteen days. The eggs vary from four to seven, and differ from all the known eggs of this family found within the United States, being unspotted. They are glaucous

green in color, and the majority are much more glossy than Jays' eggs generally are. In one hundred and thirty-six specimens examined, all were perfectly immaculate.



ARIZONA JAY.

$\frac{3}{5}$  Life-size.

CHICAGO COLORTYPE CO.

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A



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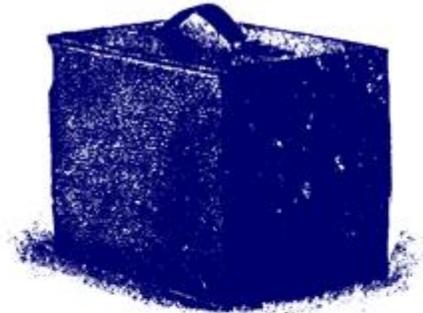
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## TESTIMONIALS.

NEW YORK, N. Y., Dec. 21, 1896.  
W. E. WATT,  
Chicago, Ill.

My dear Mr. Watt: I am glad to get yours of the 17th, and to find at the top of the letter head the names of two good friends, interested in so novel and valuable an undertaking. The idea is a good one, and the execution seems to me extraordinary for the price. With

best  
Yours  
NICHOLAS  
Columbia University, New York.

MURRAY

wishes,  
sincerely,  
BUTLER,

---

NEW YORK, N. Y., December 21, 1896.  
MR. W. E. WATT,  
Fisher Building, 277 Dearborn Street,  
Chicago, Ill.

Dear Mr. Watt: I thank you very much for the copy of "Birds," which has just been received, and I must congratulate you upon putting forth so attractive a publication. I shall be very glad to receive circulars stating the price of subscription.  
Very truly yours,  
EDWARD R. SHAW,  
New York University, Washington Square, N. Y.

---

CAMDEN, N. Y., March 3, 1897.  
MR. CHAS. H. DIXON,  
NATURE STUDY PUBLISHING COMPANY,  
Chicago, Ill.

My dear Sir: The sample of "Birds" received. I am exceedingly pleased with the beautiful little magazine. The cuts are truly marvelous. Why did not somebody think of the scheme before? It *must* prove a grand success. Every teacher that knows enough to teach will be an enthusiastic admirer of "Birds." I shall do all I can for it. Please send me a few more copies. Find some stamps enclosed.  
Cordially yours,  
D. D. VAN ALLEN,  
Principal Camden High School.

---

CHICAGO, ILL., March 5th, 1897.  
MR. C. MARBLE,  
277 Dearborn Street, Chicago, Ill.

Dear Sir: Your kindness in sending me Nos. 1 and 2 of "Birds," and also the premium picture "Golden Pheasant," is most fully appreciated. Your magazine, of course, is most attractive by reason of the beautiful pictures it contains, which are finer than any heretofore issued, including "Baird's" and "Audubon's." I also find that the descriptions and general reading matter are very interesting. It will equally please both adult and youth, I am sure, so I wish your enterprise the success it so abundantly deserves.

Very

truly

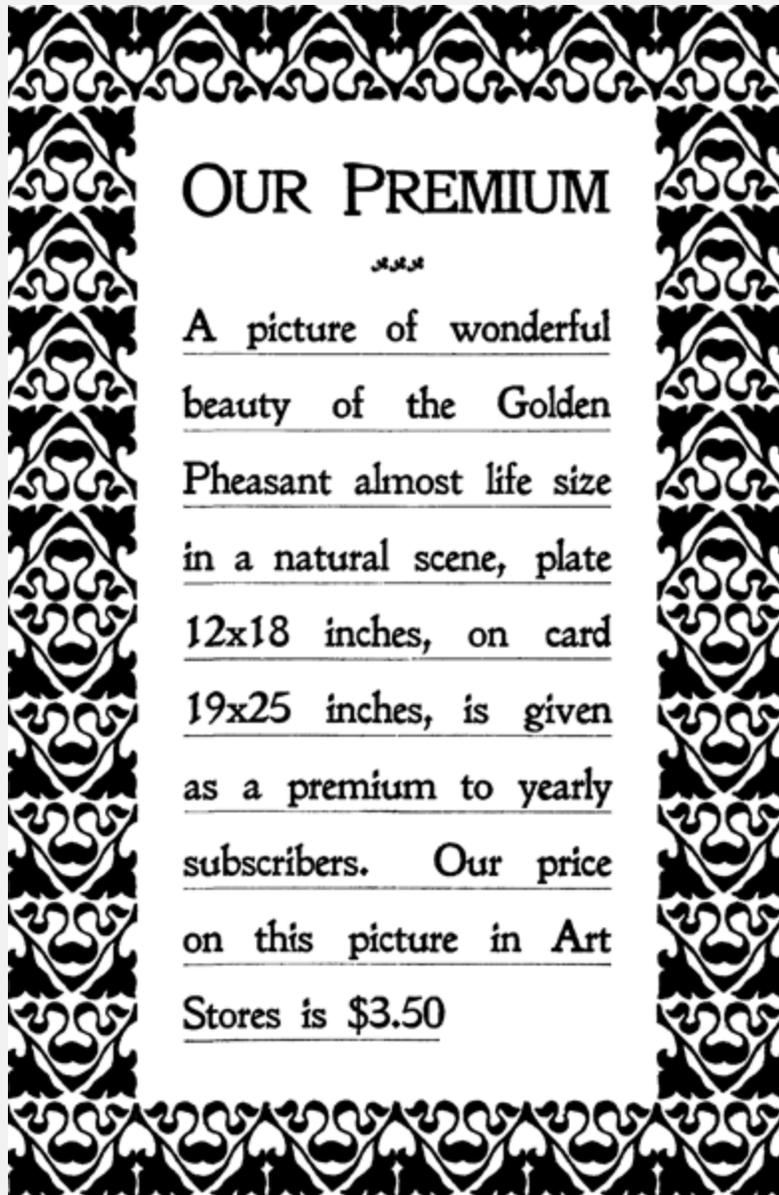
yours,

HIRAM

BALDWIN,

General Manager Northern Life Association.

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\*\*\* END OF THE PROJECT GUTENBERG EBOOK BIRDS, ILLUSTRATED BY COLOR PHOTOGRAPHY, VOL. 1,  
NO. 4 \*\*\*

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