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JULY 1898 ***

BIRDS

AND

ALL NATURE

A MONTHLY SERIAL
ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOLUME IV.

CHICAGO and NEW YORK.
NATURE STUDY PUBLISHING COMPANY.

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INTRODUCTION.

As heretofore announced, beginning with the present, each number of BIRDS AND ALL NATURE will present at least two birds, three or four animals, and the remaining plates will depict such

natural subjects as insects, butterflies, flowers, geological specimens, etc. In fact, everything in nature which can be brought before the camera will in its due course be portrayed.

BIRDS is without doubt one of the most popular magazines ever presented to the American public. It is read and admired by over one hundred thousand persons.

BIRDS AND ALL NATURE promises to be even more popular, if possible, than BIRDS. We are constantly receiving congratulations on the success of our enterprise, and people are delighted to learn that we shall include in succeeding numbers all interesting branches of natural history. When the bound volume appears it will prove to be worthy of its predecessors.

Nature Study Publishing Company.

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SQUIRREL TOWN.

Where the oak trees tall and stately
Stretch great branches to the sky
Where the green leaves toss and flutter
As the summer days go by,
Dwell a crowd of little people,
Ever racing up and down,
Bright eyes glancing, gray tails whisking;
This is known as Squirrel Town.

Bless me, what a rush and bustle,
As the happy hours speed by!
Chatter, chatter—chatter, chitter,
Underneath the azure sky.
Laughs the brook to hear the clamor;
Chirps the Sparrow, gay and brown
"Welcome! Welcome, everybody!
Jolly place, this Squirrel Town."

Honey-bees the fields are roaming;
Daisies nod and lilies blow;
Soon Jack Frost—the saucy fellow—
Hurrying, will come, I know.
Crimson leaves will light the woodland;
And the nuts come pattering down.
Winter store they all must gather—
Busy place, then, Squirrel Town.

Blowing, blustering, sweeps the north wind—
See! the snow is flying fast.
Hushed the brook and hushed the Sparrow,
For the summer time is past.
Yet these merry little fellows
Do not fear old Winter's frown;
Snug in hollow trees they're hiding.
Quiet place is Squirrel Town.

—ALIX THORN.

BIRDS AND ALL NATURE.

ILLUSTRATED BY COLOR PHOTOGRAPHY.

VOL. IV.

JULY, 1898.

No. 1.

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From col. Chi. Acad.
Sciences.

WILSON'S SNIPE.
7/9 Life-size.

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WILSON'S SNIPE, otherwise known as the English Snipe, Jacksnipe, and Guttersnipe, and which is one of our best known game birds, has a very extended range; indeed, covering the whole of North America, and migrating south in the winter to the West Indies and northern South America. Its long, compressed, flattened, and slightly expanded bill gives it an odd appearance, and renders it easily recognizable. From March till September the peculiar and cheerful "*cheep*" of the Snipe may be heard in the larger city parks where there are small lakes and open moist grounds, and where it can feed and probe with its long, soft, sensitive, pointed bill in the thin mud and soft earth for worms, larvae, and the tender roots of plants. In some localities in the Southern states, during the winter months, thousands of Snipe are killed on the marshes where they collect on some especially good feeding ground. We have rarely seen more than two together, as they are not social, moving about either alone or in pairs. Its movements on the ground are graceful and easy, and, while feeding, the tail is carried partly erect, the head downward, the bill barely clearing the ground. We recently watched one through an opera glass, but the frequency of its changes from point to point and the rapidity of its flight discouraged long observation. The flight is swift, and, at the start, in a zigzag manner. Sportsmen say it is a most difficult bird to shoot, requiring a quick eye and a snap shot to bag four out of five. Col. Goss said that he always had the best success when the birds were suddenly flushed, in shooting the instant its startled "*scaipe*" reached his ear, "as it is invariably heard the moment the bird is fairly in the air."

It is entertaining to watch the courtship of these birds, "as the male struts with drooping wings and wide spread tail around his mate in the most captivating manner, often at such times rising spiral-like with quickly beating wings high in the air, dropping back in a wavy, graceful circle, uttering at the same time his jarring, cackling love note, which, with the vibration of the wings upon the air, makes a rather pleasing sound."

The snipe's nest is usually placed on or under a tuft of grass, and is a mere depression, scantily lined with bits of old grass and leaves. The eggs are three or four, greyish olive, with more or less of a brownish shade, spotted and blotched chiefly about the larger end with varying shades of umber brown.

If you want to identify Wilson's Snipe, have with you a copy of this number of BIRDS AND ALL NATURE as you stroll along shore or beach. Our picture is his very image.

THE BLACK WOLF.

Some of my little readers have probably heard about the small boy who thought it rare fun to frighten his friends by crying "Wolf! Wolf!" as though he were being pursued. They lived in a wild part of the country where Wolves were frequently seen, but in time they grew used to Johnnie's little joke, so that one day when he cried "Wolf! Wolf!" in frantic tones they paid no attention to him. Alas! that day a Wolf really did sneak out of the woods—a hungry Wolf—and poor little Johnnie furnished him a very satisfactory meal. There is a deep meaning attached to this fable, which you had best ask your teacher to explain.

Well, the Black Wolf, whose picture we present is a fierce looking fellow indeed. We have heard so many stories about Wolves attacking travelers and their horses that we have thought them full of ferocity and courage, when in fact they are the most cowardly of all our animals. Unless pressed by extreme hunger they never attack animals larger than themselves, and then only in packs. A cur dog, as a rule, can drive the largest wolf on the plains. Lean, gaunt, and hungry looking, they are the essence of meanness and treachery. Their long, bushy tails are carried straight out behind, but when the animal is frightened, he puts his tail between his legs just like the common dog.

There are men who make it a business to go Wolf hunting in order to secure their "pelts," or hides. The bait they use is the carcass of some animal, elk, deer, or coon, which they impregnate with poison, and leave in a place which will do the most good. In the morning sometimes as many as fifty dead Wolves will be found scattered about the carcass whose flesh they had so ravenously devoured. A Wolf skin is worth about one dollar and a half, so that it pays a hunter very well to "catch" a number of these mean animals.

They are sometimes hunted on horseback with hounds, but they can run with such speed when frightened, that no ordinary dog can keep up with them. Among the pack are one or more greyhounds, who bring the wolf to bay and allow the other dogs to come up.



From col. Mr. F.
Kaempfer.

BLACK WOLF.
1/9 Life-size.

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THE BLACK WOLF.

AT one time the Black Wolf of America was considered by naturalists to be only a variety of the common Wolf, but it is now believed to be a distinct species, not only by reason of the color of its fur but from differences of stature, the position of the eye, the peculiar bushiness of the hair and other evidence entitling it to rank as a separate species. This variety is referred to as an inhabitant of Florida, and is described as partaking of the general lupine character, being fierce, dangerous, and at the same time cowardly and pusillanimous, when they find themselves fairly enclosed. If imprisoned in even a large space, they crouch timidly in the corners, and do not venture to attack man when he enters the cage. Audubon mentions a curious instance of this strange timidity in a ferocious nature, of which he was an eye-witness: "A farmer had suffered greatly from Wolves, and determined to take revenge by means of pitfalls, of which he had dug several within easy reach of his residence. They were eight feet in depth and wider at the bottom than at the top. Into one of these traps three fine Wolves had fallen, two of them black, and the other a brindled animal. To the very great astonishment of Mr. Audubon, the farmer got into the pit, pulled out the hind legs of the Wolves, as they lay trembling at the bottom, and with his knife severed the chief tendon of the hind limbs, so as to prevent their escape. The skins of the captured animals were sufficiently valuable to reimburse the farmer for his labor and his previous losses."

The Esquimaux use traps made of large blocks of ice, constructed in the same manner as our ordinary mouse-trap with a drop-door. The trap is made so narrow that the Wolf cannot turn himself, and when he is closed in by the treacherous door, he is put to death by spears.

Wood says that when Wolves and Dogs are domesticated in the same residence a mutual attachment will often spring up between them, although they naturally bear the bitterest hatred to each other. A mixed offspring is sometimes the result of this curious friendship, and it is said that these half-breed animals are more powerful and courageous than the ordinary Dog. Mr. Palliser possessed a fine animal of this kind, the father of which was a White Wolf and the mother an ordinary Indian Dog. It is a well-known fact that the Esquimaux are constantly in the habit of crossing their sledge Dogs with Wolves in order to impart strength and stamina to the breed. Indeed they are so closely related to Wolves that there can be no question that they are descended from them.

The Wolf produces from three to nine young in a litter. In January the mother Wolf begins to prepare her habitation, a task in which she is protected or assisted by her mate, who has won her in a fair fight from his many rivals. He attaches himself solely to one mate, and never leaves her till the young Wolves are able to shift for themselves. The den in which the young cubs are born is warmly lined with fur which she pulls from her own body. The cubs are born in March and remain under her protection seven or eight months. They begin to eat animal food in four weeks after birth.

The Wolf's whelp will at last a Wolf become
Though from his birth he find with man a home.
Arabian Proverb.

AN ARMADILLO AS A PET.

NURSE McCULLY of the Royal infirmary, Liverpool, has an Armadillo as a pet. This little animal, which is a native of South America, was given to the nurse by a sailor when it was quite a baby, weighing only three pounds. It was most advantageously reared on peptonized milk,—ordinary cow's milk being too strong,—and the little creature now weighs 11 pounds. Its present diet is peculiar, consisting of bread and milk, bacon, apples, and sardines. Also, it supports its adopted

country by eating English tomatoes, but rejecting American ones. It sleeps all day, rising at 6 p. m. and running all over the ward. Its chief amusement seems to be tearing to pieces the patients' slippers. It knows its mistress, and will readily come to her. The little Armadillo sleeps in a warm barrel, furnished with bran and flannel. It has now been at the Royal infirmary for about four years.—*Strand Magazine*.

AFRICAN FOLK LORE.

AFRICAN LITERATURE is very rich in fables of animals, which may be divided into the two categories of moral apologues and simple narrations. In the former such an identity is noticeable with stories of the peoples of Asia and Europe as almost to cause us to think that both proceed from a common source whence they were drawn in prehistoric times. To this may, however, be opposed the hypothesis of an original and simultaneous origin in different places; a question for the discussion of which we have not yet all the elements. One of the most brilliant of the African apologues comes from Somaliland, and is perhaps better than the corresponding European fable: "The Lion, the Hyena, and the Fox went hunting, and caught a Sheep. The Lion said, 'Let us divide the prey.' The Hyena said, 'I will take the hinder parts, the Lion the fore parts, and the Fox can have the feet and entrails.' Then the Lion struck the Hyena on the head so hard that one of its eyes fell out, then turned to the Fox and said, 'Now you divide it.' 'The head, the intestines, and the feet are for the Hyena and me; all the rest belongs to the Lion.' 'Who taught you to judge in that way?' asked the Lion. The Fox answered, 'The Hyena's eye.'"—*Popular Science Monthly*.



From col. F. M.
Woodruff.

RED SQUIRREL.
 $\frac{2}{3}$ Life-size.

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THE RED SQUIRREL.

HICKAREE is the common name of the Red Squirrel, so called from the cry which it utters. It is one of the most interesting of the family, and a pleasing feature of rural life. During the last weeks of autumn the Squirrel seems to be quite in its element, paying frequent visits to the nut trees and examining their fruit with a critical eye, in anticipation of laying up a goodly store of food for the long and dreary months of winter; as they do not, as was formerly asserted, hibernate, but live upon the stores they secure. A scarcity may mean much suffering to them, while an abundance will mean plenty and comfort. In filling their little granaries, they detect every worm-eaten or defective nut, and select only the soundest fruit, conveying it, one by one, to its secret home. Feeding abundantly on the rich products of a fruitful season, the Squirrel becomes very fat before the commencement of winter, and is then in its greatest beauty, the new fur having settled upon the body, and the new hair having covered the tail with its plummy fringe.

Did you ever watch a squirrel open and eat the contents of a nut? It is very curious and interesting. The little fellow takes it daintily in his fore-paws, seats himself deliberately, and then carrying the nut to his mouth, clips off the tips with his sharp chisel-edged incisor teeth. He then rapidly breaks away the shell, and after peeling the husk from the kernel, eats it complacently, all the while furtively glancing about him, ever in readiness to vanish from his post at any suspicious disturbance. The food of the Squirrel is not vegetable substances. Young birds, eggs, and various insects constitute a part of his food. He has the destructive habit of nibbling green and tender shoots that sprout upon the topmost boughs, thus stunting the growth of many a promising tree. He visits the farmers' corn-cribs, too, and thus renders himself somewhat obnoxious. All in all, however, he has his uses, and should not be wholly exterminated. Tender and juicy, he has always paid for his apparent despoliation, and his destruction of much injurious insect life rather favors his protection.

The Squirrel is a variable animal in point of color, the tint of its fur changing with the country it inhabits. It is easily tamed, and is a favorite domestic pet. It is said, however, that one should beware of purchasing so-called tame Squirrels, as they are often drugged with strychnine, under whose influence they will permit themselves to be handled. In some cases the incisor teeth are drawn, to prevent them from biting. It is sad that such cruel tricks of the vendors exist and cannot be prevented.

It is related that about 1840, during a season of great scarcity of mast, vast multitudes of Squirrels migrated from the eastern states to Canada, where food conditions were more favorable. They crossed the country in armies, swam rivers with their tails curled over their backs, sailing before the wind. It was a curious instance of rare instinct and self-preservation.

SECRETS OF AN OLD GARDEN.

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THIS garden had some small fruit trees thickly covered with leaves, and a tangle of currant bushes and raspberry vines, as well as neatly worked rows of vegetables. There was also a thick clump of tall, feathery grass beside the paling.

It was well it had these small places of refuge, for it had many perils. Two cats, a white and a gray, patrolled the garden with silent and velvety tread; boys, who were not silent, used all kinds of small but deadly weapons on the street that ran beside it, and great heavy wagons rumbled up and down all day, making a great noise and dust.

But how many birds I have seen and heard there! Red-headed Woodpeckers tapped and called early in the morning on the tall telegraph pole at the corner, and flocks of Grackles, the Bronze, the Purple, and the Rusty Grackles, were fed from the fresh-turned earth. A Catbird hopped lightly in the shadow of the tool-house, and I suspect some Robins of foraging turn with their young families. Sparrows of all kinds dwelt there—flocks of yellow Ground Sparrows, Brown and Gray Sparrows, Clipping Sparrows. I saw one day the funniest Clipping baby with his chestnut cap pushed up into a regular crown almost too big for his tiny head, and the brightest black eyes peering at me, as he stood on a clod of earth. Flocks, also, of Goldfinches, glittering like small balls of gold, and Indigo Buntings, blue as the sky, held merry-makings there, and oh, the songs from morning until night! A Warbling Vireo sang so loud and so splendidly that we thought he must be some big bird of scarlet plumage instead of the wee wood-sprite he was; and little Wrens and little Indigo Birds fairly bubbled over with songs of joy.

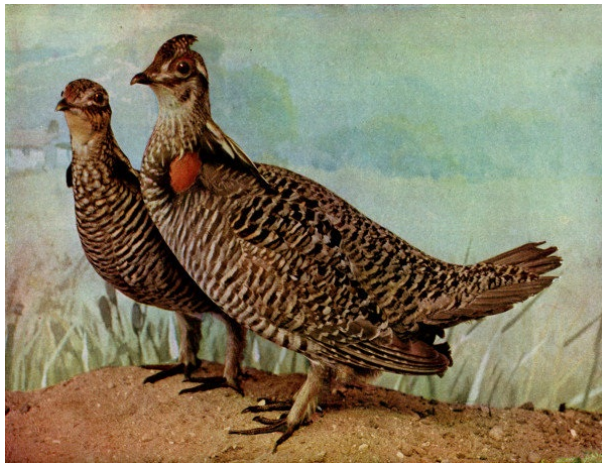
The nests, the hidden nests, were the old garden's secrets, and the garden kept them well. There was a flutter of wings, the bird floated down, and was straightway invisible. Not the tip of a tail or beak was to be seen. Or up flew the bird and was as quickly lost in the thick screen of interwoven leaves overhead. There were certain gray birds so much the color of the dead wood on which they perched that they might have nested in full, open view, and yet have remained unseen until they moved. How the little birds did love this garden—the noisy street on one side, the close, dingy houses on the other, and how near its heart did the old garden keep the birds.

So many and such different birds—yet "not one of them is forgotten before God."—ELLA F. MOSBY.

BIRDS FORTELL MARRIAGE.

Some of the Prussian girls have an odd way of finding out which of a number will be married first. The girls take some corn and make a small heap of it on the floor, and in it conceal one of their finger rings. A chicken is then introduced and let loose beside the little heaps of corn. Presently the bird begins to eat the grain, and whichever ring is first exposed the owner of it will be the first to marry.

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From col. Chi. Acad.
Sciences.

PRAIRIE HEN.
 $\frac{2}{3}$ Life-size.

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THE PRAIRIE HEN.

RUTTALL says that, choosing particular districts for residence, this species of Grouse is far less common than its Ruffed relative. It is often called Prairie Chicken and Pinnated Grouse. Confined to dry, barren, and bushy tracts of small extent, these birds are in many places now wholly or nearly exterminated. They are still met with on the Grouse plains of New Jersey, on Long Island, in parts of Connecticut, and in the Island of Martha's Vineyard. Mr. Nuttall was informed that they were so common on the ancient bushy site of the city of Boston that laboring people or servants stipulated with their employers not to have the Heath Hen brought to table oftener than a few times in the week. They are still common in the western states, but thirty years ago we saw vast numbers of them on the plains of Kansas. As there were no railroads then, they could not be sent to market, and were only occasionally eaten by the inhabitants. The immense wheat fields which have been sown for a number of years past have largely increased this species, where they assemble in flocks, and are the gleaners of the harvest.

Early in the morning Grouse may be seen flying everywhere, from one alone to perhaps a thousand together. They alight in the cornfields. "Look! Yonder comes a dozen; they will fly right over you; no, they swerve fifty yards to one side and pass you like bullets; single out your bird, hold four feet in front of him, and when he is barely opposite cut loose. Following the crack of the gun you hear a sharp whack as the shot strike, and you have tumbled an old cock into the grass. You have of course marked down as many of the birds as possible; let them feed an hour and then drive them up. They will rise very wild, and the only object in flushing them is to see them down where they will take their noon-day siesta."

On the prairies they are often shot from a wagon, the hunter remaining seated, so plentiful are they in remote districts. Near the towns very few are seen. The birds always seem to prefer the low ground in a field. They are rarely seen during the middle of the day, as they do not move about much. It is a fine sight to see a large flock of chickens rise on the wing and fly swiftly and steadily for several hundred yards. When they drop in the grass they separate and run in every direction. Like the Quail, in the inclemency of winter they approach the barn, "basking and perching on the fences, occasionally venturing to mix with the poultry in their repast, and are then often taken in traps." They feed on buds and mast, sometimes leaves and the buds of the pine. In wintry storms they seek shelter in the evergreens, but in spring and summer they often roost on the ground in company. These birds begin pairing in March or April. Mr. Nuttall's account of this interesting period (see his Hand-book of Ornithology—Little, Brown & Co.)—is as follows: "At this time the behavior of the male becomes remarkable. Early in the morning he comes forth from his bushy roost and struts about with a curving neck, raising his ruff, expanding his tail like a fan, and seeming to mimic the ostentation of the Turkey. He now seeks out or meets his rival, and several pairs at a time, as soon as they become visible through the dusky dawn, are seen preparing for combat. Previously to this encounter, the male, swelling out his throat, utters what is called a tooting—a ventriloquial humming call to the female three times repeated, and though uttered in so low a key, it may yet be heard three or four miles on a still morning. About the close of March on the plains of Missouri we heard this species of Grouse tooting or humming in all directions, so that at a distance the sound might be taken almost for the grunting of the Bison or the loud croak of the Bull-frog. While uttering his vehement call the male expands his neck pouches to such a magnitude as almost to conceal his head, and blowing, utters a low drumming bellow like the sound of *k-tom-boo! k-tom-boo!* once or twice repeated, after which is heard a sort of guttural squeaking crow or *koak, koak, koak*. In the intervals of feeding we sometimes hear the male also cackling, or, as it were, crowing like *ko, ko, koop, koop!* While engaged in fighting with each other, the males are heard to utter a rapid, petulant cackle, something in sound like excessive laughter. The tooting is heard from day-break till eight or nine o'clock in the morning. As they frequently assemble at these *scratching places*, as they are called, ambuscades of bushes are formed around them, and many are shot from these covers."

The nest is placed on the ground in the thick prairie grass, and at the foot of bushes on the barren ground; a hollow is scratched in the soil, and sparingly lined with grass and feathers. The nest is so well concealed that it is not often discovered. The eggs are from ten to twelve, and of a plain brownish color. The female alone protects and attends the young, brooding them under her wings in the manner of the domestic fowl. The affectionate parent and her brood keep together throughout the season.

ABOUT THE SONGSTERS.

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NEW NEIGHBORS.—"I see they are building a two-story house in our back yard," said papa.

"O papa, that won't be nice!" said Marjorie. "People will look right into our windows!"

"Yes," said papa; "one of the builders was sitting on my window-sill this morning; but when he saw me he flew away."

"Oh, you mean a bird!" cried Nan.

BLUE-JAY ON A SPREE.—"Naw, sir, I ran him down. He's drunk on mad berry. I didn't shoot him," so said our little stable-boy, John Henry. We examined the beautiful Blue-Jay.

It was lying in the boy's hand, with a sort of contented *dolce far niente* expression on its face. Its saucy eyes were elated and fearless. Its head wagged ridiculously in the effort to hold it up. It was a common North American drunk, nothing less. The bird was intoxicated on the berries of the Pride of China, known throughout the south as the poison or mad-berry.

In Florida thousands of respectable Northern Robins, that would blush to do it at home, are found lying about in the state of grossest drunkenness from the same cause. We wondered if some blue-ribbon society might not be profitably started among these poor birds. But they do not know any better.

We have this advantage over them, we know the mad-berry when we see it. It is to our disgrace if we do not let it alone.

SERVES AS WATCHMAN AND WAKES THE FAMILY.—A Mocking Bird serves as a night watchman at the residence of R. F. Bettes, at Tampa, Fla., and notifies the family of the coming of dawn every morning by pecking on the window pane. Often when the doors are left ajar the Mocking Bird comes inside and perches on the chairs and about the room. It will allow the family to come very close and shows marked attention to Mrs. Bettes and her little daughter. When they start out for a visit it follows them some distance, and then returns to the yard. When the family returns it appears very glad and will fly all about them, and gives evidence of its joy in other ways. The children feed it about the house, and when the family meal is to be served, if the window is not raised, it makes its presence known by pecking on the window. During the day it gets on a neighboring brush or tree and sings its roundelay of song for hours at a time.

A WONDERFUL CANARY.—Mrs. Willet C. Durland, of Union Hall street, Jamaica, is the owner of a Canary possessing extraordinary vocal powers. It never tires of singing, and was the admiration of all who heard it, until eight months ago, when it suddenly, and for no apparent reason, became absolutely silent, uttering scarcely a chirrup for days at a time. Mrs. Durland at last tired of keeping a Canary that did not sing, and, finding a young Chippie bird on the lawn, one day, she put it in the cage and let the Canary go. About sundown that evening, the Canary returned and hopped about on the window sill, evidently making a plea to be received back into the family. This was too much for Mrs. Durland. She put the little creature back in its cage, and the next morning the household was awakened by a flood of joyous song. The Canary has been singing ever since, and the Durlands are sure it considers being set free a punishment for its long silence, and is now trying to make amends.

THE BUTTERFLY TRADE.

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HERE are probably hundreds, if not thousands, of butterfly collectors in this country, says the Boston Transcript. But it is doubtful if there are many who gain their livelihood in this way, as is done by the four Denton brothers of Wellesley, who have among them one of the finest, and certainly one of the most beautiful collections in the world, comprising specimens from India,

China, South America, and many other distant countries.

Large and fine as their collection is, however, it contains only a small part of the butterflies that they have collected, as almost all of them are sold to museums, and collectors, or simply as house ornaments, for as they mount them, they are objects of great beauty and are preserved in such a way as to give every opportunity for the display of their fine points, while they will last for an indefinite number of years.

They began this work in the usual amateur manner, and simply for their own amusement, but instead of becoming tired of it and dropping it, as is the case with most amateur collectors, they became more and more interested, and their methods attracted so much attention and interest in outsiders that they finally found it advisable to adopt this as their life work. How extensive a business it is may be judged from the fact that they have found it profitable to make a journey of six months to South America for the purpose of increasing the size of their collection, and that they have in India, China, and several other parts of the world agents who collect for them and ship the butterflies to them here.

The work of preparing the butterflies for sale and exhibition is all done in a small building back of their house on Washington street at Wellesley, and keeps them busy nearly all the time that they are not collecting. When the butterflies are sent or brought in, each is in a small paper folder, which protects it from friction or breakage. The insects are laid with their wings together and pressed, being then put into the folder, and shipped in small boxes, enough being put into each box to prevent them from slipping about. In this way the insects arrive in very good condition, although they are, of course, very dry and brittle if they have come a long distance. In order to get rid of this dryness, which would make it impossible to work on them, they are put into a box with a lot of wet paper, and the dampness from this soon saturates them and makes them soft again and easily shaped. The next part of the work is in repairing what damage they have sustained, for, of course, in spite of the care of shipping, they are not as perfect as before they were caught, and there is a great deal of delicate work on them before they are ready for exhibition or sale.

Mounted, a drawer full of butterflies is more beautiful than a collection of precious gems, for, although many of our native butterflies are exceedingly beautiful, they are not to be compared with the average of those from India, China, and South America. In these dead, heavy black alternates with brilliant crimson, yellow, and gold, livid greens and blues, and deep, rich garnet and purple, sometimes in broad bands and blotches of glowing color, and in others in wonderfully delicate and intricate traceries and patterns. The texture of the wings is also infinitely more beautiful than anything we have here, some of them having a heavy rich gloss that exceeds that on the finest fabric that human skill can produce, while others have the deep changing lustre of gems or liquids.



Arginnis Alcestis. BUTTERFLIES. Colias Eurytheme.
Phyciodes Nycteis. Life-size. Danais Archippus.
Vanessa Antiopa. Pieris Protodice. Debis Portlandia.
Meganostoma Caesonia. Pyrameis Huntera.

THE PASSENGER PIGEON IN WISCONSIN AND NEBRASKA.

[See Vol. III, p. 23.]



OUR records of this species during the past few years have referred, in most instances, to very small flocks and generally to pairs or individuals. In *The Auk* for July, 1897, I recorded a flock of some fifty Pigeons from southern Missouri, but such a number has been very unusual. It is now very gratifying to be able to record still larger numbers, and I am indebted to Mr. A. Fugleberg of Oshkosh, Wis., for the following letter of information under date of Sept. 1, 1897: "I live on the west shore of Lake Winnebago, Wis. About six o'clock on the morning of August 14th, 1897, I saw a flock of Wild Pigeons flying over the bay from Fisherman's Point to Stony Beach, and I assure you it reminded me of old times, from 1855 to 1880, when Pigeons were plentiful every day. So I dropped my work and stood watching them. This flock was followed by six more flocks, each containing about thirty-five to eighty Pigeons, except the last which only contained seven. All these flocks passed over within half an hour. One flock of some fifty birds flew within gun shot of me, the others all the way from one hundred to three hundred yards from where I stood." Mr. Fugleberg is an old hunter and has had much experience with the Wild Pigeon. In a later letter dated Sept. 4, 1897, he writes: "On Sept. 2, 1897, I was hunting Prairie Chickens near Lake Butte des Morts, Wis., where I met a friend who told me that a few days previous he had seen a flock of some twenty-five Wild Pigeons and that they were the first he had seen for years."—This would appear as though these birds were instinctively working back to their old haunts, as the Winnebago region was once a favorite locality. We hope that Wisconsin will follow Michigan in making a close season on Wild Pigeons for ten years, and thus give them a chance to multiply and perhaps regain, in a measure, their former abundance.

In *Forest and Stream*, of Sept. 25, 1897, is a short notice of 'Wild Pigeons in Nebraska,' by 'W. F. R.' Through the kindness of the editor he placed me in correspondence with the observer, W. F. Rightmire, to whom I am indebted for the following details given in his letter of Nov. 5, 1897: "I was driving along the highway north of Cook, Johnson County, Neb., on August 17, 1897. I came to the timber skirting the head stream of the Nemaha River, a tract of some forty acres of woodland lying along the course of the stream, upon both banks of the same, and there, feeding on the ground or perched upon the trees were the Passenger Pigeons I wrote the note about. The flock contained seventy-five to one hundred birds. I did not frighten them, but as I drove along the road, the feeding birds flew up and joined the others, and as soon as I had passed by they returned to the ground and continued feeding. While I revisited the same locality, I failed to find the Pigeons. I am a native of Tompkins County, N. Y., and have often killed Wild Pigeons in their flights while a boy on the farm, helped to net them, and have hunted them in Pennsylvania, so that I readily knew the birds in question the moment I saw them." —RUTHVEN DEANE in April *Auk*>.

THE AMERICAN RABBIT.



COTTONTAIL and Molly Cottontail are the names commonly applied to this easily recognized species of the Rabbit family, everywhere prevalent in the middle states, continuing to be numerous in spite of the fact that it is constantly hunted in season for food. Its flesh is more delicate than that of the larger species, and is much valued. In winter the city markets are well supplied with Cottontails, their increase being so large that they are always abundant, while in rural districts the small boys capture them in great numbers with dogs. We have known two hundred of these innocent creatures to be taken in one day on a single farm. If protected for but one season they would become as Rabbits are in Australia, a pest.

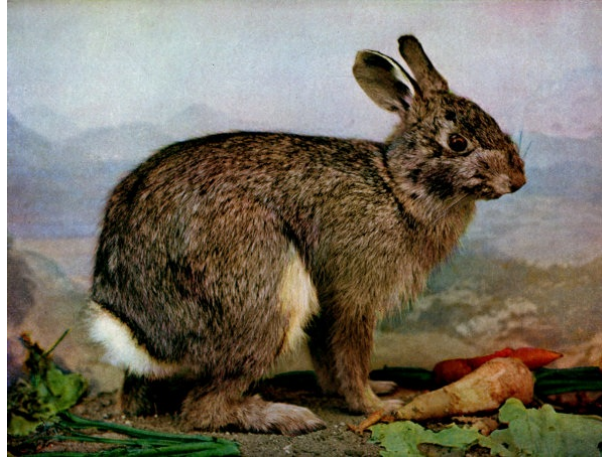
Rabbits live in burrows, which are irregular in construction and often communicate with each other. From many of its foes the Rabbit escapes by diving into its burrow, but there are some animals, as the Weasel and Ferret, which follow it into its subterranean home and slay it. Dogs, especially those of the small terrier breeds, will often force their way into the burrows, where they have sometimes paid the penalty of their lives for their boldness. The Rabbit has been seen to watch a terrier dog go into its burrow, and then fill up the entrance so effectually that the invader has not been able to retrace his steps, and has perished miserably in the subterranean tomb.

When the female Rabbit is about to begin to rear a family, she quits the ordinary burrows and digs a special tunnel in which to shelter the young family during the first few weeks of life. At the extremity of the burrow she places a large quantity of dried herbage mingled with down from her own body, with which to make a soft and warm bed for the little ones. These are about seven or eight in number, and are born without hair and with closed eyes, which they are only able to open after ten or twelve days.

When domesticated the female Rabbit will often devour her young, a practice which has been considered incurable. This propensity has, however, been accounted for by natural causes. It has been the custom to deprive pet Rabbits of water on the ridiculous plea that in a wild state they do

not drink, obtaining sufficient moisture from the green herbs and grasses which constitute their food, but in the open country they always feed while the dew lies upon every blade, which of course is never the case with green food with which domestic Rabbits are supplied. Thus have these poor innocents been the victims of ignorance.

Rabbits are great depredators in fields, gardens, and plantations, destroying in very wantonness hundreds of plants which they do not care to eat. They do great damage to young trees, stripping them of their tender bark, as far up as they can reach while standing on their hind feet. Sometimes they eat the bark, but in many cases they leave it in heaps upon the ground, having chiseled it from the tree merely for the sake of exercising their teeth and keeping them in good order.



From col. Chi. Acad.
Sciences.

GRAY RABBIT.
½ Life-size.

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It is true that most Rabbits burrow in the ground, their burrows having many devious ramifications, but the Cottontail usually makes his home in a little dug-out, concealed under a bush or a tuft of grass. We remember one of these little excavations which we found in a cemetery concealed by the overhanging branches of a rosebush at the foot of a grave. While reading the inscription on the tombstone we were startled by a quick rush from the bush, and discovering the nest, in which there were five tiny young with wide open eyes, we took them up tenderly and carried them home. We too, were young then. Admonished that we had cruelly deprived a mother of her offspring, and that our duty was to return them to her, we unwillingly obeyed, and put them back in the little cavern. They huddled together once more and no doubt were soon welcomed by their parents.

A frosty Saturday morning, a light snow covering the ground, a common cur dog, Cottontail tracks, and a small, happy boy. Do you not see yourself as in a vision?

THIRTY MILES FOR AN ACORN.

Far away I hear a drumming—
Tap, tap, tap!
Can the Woodpecker be coming
After sap?

DOWN in Mexico there lives a Woodpecker who stores his nuts and acorns in the hollow stalks of the yuccas and magueys. These hollow stalks are separated by joints into several cavities, and the sagacious bird has somehow found this out, and bores a hole at the upper end of each joint and another at the lower, through which to extract the acorns when wanted. Then it fills up the stalks solidly and leaves its stores there until needed, safe from the depredations of any thievish bird or four-footed animal.

The first place in which this curious habit was observed was on a hill in the midst of a desert. The hill was covered with yuccas and magueys, but the nearest oak trees were thirty miles away, and so it was calculated, these industrious birds had to make a flight of sixty miles for each acorn stowed thus in the stalks!

An observer of birds remarks: "There are several strange features to be noticed in these facts: the provident instinct which prompts this bird to lay by stores of provisions for the winter, the great distance traversed to collect a kind of food so unusual for its race, and its seeking in a place so remote from its natural abode a storehouse so remarkable."

Can instinct alone teach, or have experience and reason taught these birds that, far better than the bark of trees or crevices in rocks or any other hiding place are these hidden cavities they make for themselves with the hollow stems of distant plants?

This we cannot answer. But we do know that one of the most remarkable birds in our country is this California Woodpecker, and that he is well entitled to his Mexican name of el carpintero—the carpenter bird.—*Exchange*.

THE OCELOT.

[Pg 30]

THE smaller spotted and striped species of the genus *Felis*, of both the old and the new world, are commonly called Tiger-Cats. Of these one of the best known and most beautifully marked, peculiar to the American continent, according to authority, has received the name of Ocelot, *Felis pardalis*, though zoologists are still undecided whether under this name several distinct species have not been included, or whether all the Ocelots are to be referred to as a single species showing individual or racial variation. Their fur has always a tawny yellow or reddish-grey ground color, and is marked with black spots, aggregated in streaks and blotches, or in elongated rings enclosing an area which is rather darker than the general ground color. They range through the wooded parts of Tropical America, from Arkansas to Paraguay, and in their habits resemble the other smaller members of the cat tribe, being ready climbers and exceedingly blood-thirsty.

The fierceness of the disposition of this animal, usually called by the common name of Wild Cat, and its strength and agility, are well known, for although it is said that it does not seek to attack man, yet "when disturbed in its lair or hemmed in, it will spring with tiger-like ferocity on its opponent, every hair on its body bristling with rage," and is altogether an ugly customer to meet with.

It was long believed that the Ocelot was the offspring of the domestic cat, but it is now known to be distinct from the wild form of our woods. One would scarcely wish to stroke the Wild Cat's hair in any direction. As soon as the young are able to see and crawl, their savage nature is apparent, and they cannot be tamed. They are not often hunted, but when accidentally met with by the hunter are despatched as quickly as possible.

In length the Ocelot rather exceeds four feet, of which the tail occupies a considerable portion. The height averages about eighteen inches. On account of the beauty of the fur the skin is valued for home use and exportation, and is extensively employed in the manufacture of various fancy articles of dress or luxury. It may be said to be a true leopard in miniature.

In its native wilds the Ocelot seeks its food chiefly among the smaller mammalia and birds, although it is strong enough to attack and destroy a moderate sized monkey. It chases the monkeys into the tree branches, and is nearly as expert a climber as they are, but, as it cannot follow the birds into the airy region, it is forced to match its cunning against their wings, and it rarely secures them. As is often done by the domestic cat it can spring amongst a flock of birds as they rise from the ground, and, leaping into the air, strike down one or more of them with its swift paw. But its usual method of securing birds is by concealing itself among the branches of a tree and suddenly knocking them over as they unsuspectingly settle within reach of the hidden foe.

The movements of the Tiger-cat are graceful and elegant, and few specimens of animal life found in our zoological gardens are more interesting.

[Pg 31].



From col. Chi. Acad.
Sciences.

AMERICAN OCELOT.
1/3 Life-size.

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[Pg 33]

AZAMET THE HERMIT AND HIS DUMB FRIENDS.

AZAMET the vizier had been raised by Sultan Mahmoud to the highest office in the empire. As soon as he was established in his position, he tried to reform many abuses; but the nobles and imaums plotted against him.

Deprived of his property, and deserted by his friends, Azamet withdrew to the wilderness of Khorasan, where he lived alone in a hut of his own building, and planted a little garden by the side of a brook.

He had lived a hermit's life for two years, when Usbeck, one of his old friends, found his dwelling place.

The sage met the vizier about a mile from his hut; the two friends recognized each other and embraced, while Usbeck shed tears; Azamet, on the contrary, smiled, and his eyes beamed with joy. "Thanks be to God, who gives strength to the unfortunate," said Usbeck. "The man who had a gorgeous palace in the rich plains of Ghilem is contented with a hut in the wildest part of Khorasan!"

Presently, when they drew near Azamet's hut they heard a young horse neigh, and saw him come galloping to meet them. When he came near Azamet, he caressed him, and ran home before him.

Usbeck saw two fine heifers come from a pasture near by, and run back and forth near Azamet, as if offering him their milk; they began to follow him. Soon after, two goats, with their kids, ran down from a steep rock, showing, by their gambols, their delight at seeing their master, and began to frolic around him.

Then four or five sheep came out of a little orchard, bleating and bounding, to lick Azamet's hand as he patted them, smiling. At the same moment, a few pigeons and a multitude of other birds which were chirping on the trees in the orchard flew upon his head and shoulders. He went into the little yard near his cabin, and a cock saw him and crowed for joy; at this noise several hens ran, cackling, to greet their master.

But the signs of joy and love which all these animals showed were as nothing compared to those of two white dogs that were waiting for Azamet at the door. They did not run to meet him, but seemed to show him that they had been faithful sentinels over the house which their master had placed in their care. As soon, however, as he entered, they caressed him lovingly, fawning upon him, throwing themselves at his feet, and only leaping up to lick his hands. When he gave them caresses they seemed, beside themselves with delight, and stretched themselves at their master's feet.

Usbeck smiled at this sight. "Well!" said the vizier, "you see that I am now as I have been from childhood, the friend of all created things. *I tried to make men happy, but they could not let me. I made these animals happy, and I take pleasure in their affection and gratitude.* You see that even though I am in the wilderness of Khorasan, I have companions, and love and am beloved."

Listen! what a sudden rustle
Fills the air.
All the birds are in a bustle
Everywhere.

Such a ceaseless croon and twitter
Over-head!
Such a flash of wings that glitter
Wide outspread!

THE USE OF FLOWERS.

God might have bade the earth bring forth
Enough for great and small;
The oak tree and the cedar tree,
Without a flower at all.

We might have had enough, enough
For every want of ours,
For luxury, medicine, and toil,
And yet have had no flowers.

The ore within the mountain mine
Requireth none to grow;
Nor doth it need the lotus flower
To make the river flow.

The clouds might give abundant rain;
The nightly dews might fall;
And the herb that keepeth life in man
Might yet have drunk them all.

Then wherefore, wherefore were they made,
All dyed with rainbow-light,
All fashioned with supremest grace
Upspringing day and night;

Springing in valleys green and low,
And on the mountains high,
And in the silent wilderness,
Where no man passes by?

Our outward life requires them not—
Then wherefore had they birth?
To minister delight to man,
To beautify the earth.

To comfort man—to whisper hope,
Whene'er his faith is dim,
For who so careth for the flowers
Will much more care for him!

—MARY HOWITT.



APPLE BLOSSOMS.
From Nature by Chicago
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ALL NATURE.

W. E. WATT.

BIAS, one of the seven sages of Greece, was a noted political and legal orator. His most famous utterance was, "I carry all my wealth with me." His store of learning and power of speech were always at hand, and his life had been such that all his investments were in the man, rather than in property which might or might not afterwards belong to the man.

He who knows nature and has a habit of seeing things carries with him a fruitful source of happiness. It requires technical knowledge to use any of the mechanical appliances with which civilized life is crowded. It requires artistic training to appreciate any of the great productions of the leaders in the fields of ideal pleasure. But there is no preparation demanded by nature herself of those who would enjoy her feasts. Whosoever will may be her guest.

But because she is so free with the race in giving pleasure to all her guests, it must not be inferred that cultivation and systematic pursuit will not be rewarded. All eyes are blind until they have been opened, and all ears deaf till they have learned desire. Just why I am delighted with the landscape before me is beyond my power to tell, and the reasons for the varying feelings that course through me are too numerous for recognition. But with all these thronging sensations and reflections that occupy me, there is a multitude of others that escape me because I have not had my soul opened in their directions.

Every new item of nature's news that breaks upon the consciousness increases capacity for pleasure for all time. He who meets nature with enlightened senses is rewarded every day of his life for the pains taken in delightful study by way of preparation. A landscape is infinitely enhanced to him who has pursued the science of color with some diligence. The sounds of the forest speak tenderly to all; but he who knows the secrets of melody and harmony, and the limits of human skill in music, has worlds of delight in the forest that others may not enter. And so has the swain whose childhood was spent among the voices of the trees. The sense of smell has a thousand raptures for the man whose nose has lived up to its possibilities.

To look upon all nature broadly with the familiarity which comes only from long acquaintance and scientific investigation of her various aspects is the highest type of living. While this is not possible to all, yet, much of it may be experienced by every one who has the desire and follows it. The leading facts of all the sciences are open to all who care to know them. The beauties and mysteries of the world are constantly inviting us. And the rapid developments of knowledge in all directions give us all the exciting motives one can desire.

Looking out over the face of the world, we note that there are two sorts of material to be considered. One is alive or was produced by the action of life, and the other is material which has never known a want. We are drawn most to that which has pulsed with sap or blood—that which has made a struggle of some sort.

All things that live are made up chemically principally of four of the elements of the universe which are best adapted by their characteristics for the purposes of life. Three are gases, oxygen, hydrogen, and nitrogen; one is a solid, carbon. All these have what is technically known as affinities of narrow range and low intensity except oxygen. Oxygen is greedy to attack almost everything, the others unite but sparingly and feebly. From these elements, life chooses combinations that are easily changed in form and light enough to stand up from the earth, to swim in the waters, and even to fly in the atmosphere. So gaseous and quick to change are the things of life that life itself has the reputation of being fleeting. Development is a change in the arrangement of parts, and function is a transformation of motion. These four elements, three gaseous and one solid, three very exclusive and one very free in choosing all sorts of associates, have been the means whereby life has been possible upon the earth. Their characters have provided for what are known as differentiation and integration.

With these materials is formed the mass which is the lowest form of life, protoplasm. This may be formed into cells or not, but it is from this beginning the scale of living things springs, rising in beautiful and mysterious forms till the earth is enveloped and beautified so that we can hardly think of it except as the receptacle prepared by Omniscience for the entertainment of living beings, all of which point to the highest and speak of the expansion and eternal value of the human soul.

By getting next to other substances, or by getting them inside, the organism draws within itself new matter of its own selection. It chooses always material that is chemically similar to itself, and we say it grows. Where it wears away in the pursuit, it makes repairs with the fresh material. Where the pursuit is wearing, and requires great activity or strength, the new matter is consumed in furnishing energy alone.

When the period of growth is well advanced, the living thing matures organs for the preservation of its kind. Male and female are distinguished. A seed marks the female element in the plant, and in the animal an ovum or egg. And as soon as the race has been provided for, the individual is of no more use upon the face of the earth. It has served its purpose, and merits a reward. But whether in the economy of nature the joys of life are regarded as sufficient reward to every living creature, there follows fast upon the heels of its usefulness a period of lamentable decline. The elements which were so facile in building up the individual are no longer active in furnishing

energy, repair, and growth. All these products are lopped off. Weakness, debility, and shrinking ensue. The organism loses its attractiveness for its kind, the pulse of life weakens, and the corpse falls to the earth, yielding rapidly to a process of transformation called decay, which is merely a giving up of what has been recently of use to this form of life to some new form of the same sort or a different one. Life is so swift and relentless that most of its subjects fall by the way and give up their substance so effectually that there is no memory or record left upon the face of the earth that such a form has ever been.

And so God is creating the heavens and the earth. While we participate in a measure in this creation, let us observe and enjoy it and be wise.

THE BLOODLESS SPORTSMEN.

[Pg 39]

I go a-gunning, but take no gun;
I fish without a pole;
And I bag good game and catch such fish
As suit a sportsman's soul;
For the choicest game that the forest holds,
And the best fish of the brook,
Are never brought down by a rifle shot
And are never caught with a hook.

I bob for fish by the forest brook,
I hunt for game in the trees,
For bigger birds than wing the air
Or fish that swim the seas.
A rodless Walton of the brooks
A bloodless sportsman, I—
I hunt for the thoughts that throng the woods,
The dreams that haunt the sky.

The woods were made for the hunters of dreams,
The brooks for the fishers of song;
To the hunters who hunt for the gunless game
The streams and the woods belong.
There are thoughts that moan from the soul of the pine,
And thoughts in a flower bell curled;
And the thoughts that are blown with the scent of the fern
Are as new and as old as the world.

—SAM WALTER FOSS.

A BOOK BY THE BROOK.

Give me a nook and a brook,
And let the proud world spin round;
Let it scramble by hook or by crook
For wealth or name with a sound,
You are welcome to amble your ways,
Aspirers to place or to glory;
May big bells jangle your praise,
And golden pens blazon your story;
For me, let me dwell in my nook,
Here by the curve of this brook,
That croons to the tune of my book,
Whose melody wafts me forever
On the waves of an unseen river!

—JAMES FREEMAN CLARKE.

SUMMARY.

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Page 6.

WILSON'S SNIPE.—*Gallinago delicata*. Other names: English Snipe, Jack Snipe, Gutter Snipe.

RANGE—From Canada and British Columbia, south in winter to the West Indies, and even to South America. Breeds from the latitude of New England southward.

NEST—Slight depression in the grass or moss of a bog.

Eggs—Three to four; grayish-olive to greenish-brown, spotted and blotched with reddish-brown.

Page [10](#).

BLACK WOLF.—*Canis occidentalis*. Found in Florida.

Page [14](#).

AMERICAN RED SQUIRREL.—*Seiurus Hudsonius*. Other name: Chickaree, from its cry.

Common in North America.

Page [18](#).

PRAIRIE HEN.—*Tympanucus americanus*. Other name: Pinnated Grouse.

RANGE—Prairies of the Mississippi Valley, east to Indiana and Kentucky, north to Manitoba, west to the eastern Dakotas, south to Texas and Louisiana. *T. cupido*, until lately supposed to be this species, is now apparently extinct, except on the island of Martha's Vineyard.

NEST—On the ground in the thick prairie grass.

EGGS—Eight to twelve, of tawn brown, sometimes with an olive brown hue, occasionally sprinkled with brown.

Page [27](#).

AMERICAN RABBIT.—*Lepus sylvaticus*. Other names: Cottontail and Molly Cottontail.

Page [31](#).

OCELOT.—*Felis pardalis*. Other name: Tiger-Cat.

RANGE—From the southwestern United States to Patagonia.

Transcriber's Note:

- Minor typographical errors have been corrected without note.
- Punctuation and spelling were made consistent when a predominant form was found in this book; otherwise they were not changed.
- Ambiguous hyphens at the ends of lines were retained.
- The Contents table was added by the transcriber.

*** END OF THE PROJECT GUTENBERG EBOOK BIRDS AND ALL NATURE, VOL. 4, NO. 1, JULY 1898 ***

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