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THE

AUDUBON MAGAZINE

5982:06 (73)

PUBLISHED IN THE INTERESTS OF

THE AUDUBON SOCIETY

FOR THE

PROTECTION OF BIRDS.

VOLUME II.

FEBRUARY, 1888, TO JANUARY, 1889.

NEW YORK:
FOREST AND STREAM PUBLISHING COMPANY.

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CONTENTS OF VOLUME II.

ILLUSTRATIONS OF BIRDS.

	PAGE
Green Woodpecker	2
Rusty Grackles,	24
Mockingbird.	46
NIGHT HERON	68
Black and White Warbler	90
Crow.	112
PILEATED WOODPECKER	134
Towhee Bunting	156
FORK-TAILED FLYCATCHER	178
Kingbird	200
Stork	211
TUFTED TITMOUSE	222
HERMIT THRUSH	244
JOHN JAMES AUDUBON.	
Audubonian Sketches	3
AUDUBON MONUMENT	263
A VISIT TO AUDUBON'S HOME	151
ALEXANDER WILSON.	
BIOGRAPHY OF WILSON	247
Alexander Wilson's Grave.	
OBITUARY NOTICES.	
Spencer F. Baird.	0.77
HENRY BERGH.	
HEARY DEAGH	12
DESCRIPTIVE ORNITHOLOGY.	
Rusty Grackles	25
MOCKINGRIPD	17

	Page
NIGHT HERON	69
Black and White Warbler,	91
Crow	113
Pileated Woodpecker	135
TOWHEE BUNTING	157
FORK-TAILED FLYCATCHER	179
Kingbird	201
Tufted Titmouse	223
HERMIT THRUSH	245
Hints to Audubon Workers	1, 49
Slate-Colored Junco	6
Snowbird	6
Bluejay	6
Crossbills	S
Snow Bunting	34
Snow Flake	34
Hairy Woodpecker	35
Downy Woodpecker	37
WIIITE-BELLIED NUTHATCH	39
BIRD STORIES AND BIRD CHAT.	
BIND STOKES AND DIKE CHIT.	
The English Sparrow Discussed	5, 64
THE ENGLISH SPARROW DISCUSSED.	
A Family on My Hands.	18
A Family on My Hands. Houses to Let.	18
A Family on My Hands. Houses to Let The Gnatcatcher's Strategy.	18 31 40
A Family on My Hands. Houses to Let The Gnatcatcher's Strategy. An Accomplished Bluejay.	18 31 40 42
A Family on My Hands. Houses to Let The Gnatcatcher's Strategy. An Accomplished Bluejay. Clouds of Birds.	18 31 40 42 43
A Family on My Hands. Houses to Let The Gnatcatcher's Strategy. An Accomplished Bluejay. Clouds of Birds. Two Little Captives.	18 31 40 42 43 58
A FAMILY ON MY HANDS. HOUSES TO LET THE GNATCATCHER'S STRATEGY. AN ACCOMPLISHED BLUEJAY. CLOUDS OF BIRDS. TWO LITTLE CAPTIVES. HELPLESS PETS	18 31 40 42 43 58 60 61
A FAMILY ON MY HANDS. HOUSES TO LET THE GNATCATCHER'S STRATEGY. AN ACCOMPLISHED BLUEJAY. CLOUDS OF BIRDS. TWO LITTLE CAPTIVES. HELPLESS PETS. BY ALBATROSS MAIL.	18 31 40 42 43 58 60 61
A Family on My Hands. Houses to Let The Gnatcatcher's Strategy. An Accomplished Bluejay. Clouds of Birds. Two Little Captives. Helpless Pets By Albatross Mail. Bird Histories. 62, 83	18 31 40 42 43 58 60 61
A Family on My Hands. Houses to Let The Gnatcatcher's Strategy. An Accomplished Bluejay. Clouds of Birds. Two Little Captives. Helpless Pets By Aleatross Mail. Bird Histories. 62, 82 A Crossbill in Mid Ocean.	18 31 40 42 43 58 60 61 61 71
A Family on My Hands. Houses to Let The Gnatcatcher's Strategy. An Accomplished Bluejay. Clouds of Birds. Two Little Captives. Helpless Pets By Aleatross Mail Bird Histories	18 31 40 42 43 58 60 61 5, 105 62 71 75
A Family on My Hands. Houses to Let The Gnatcatcher's Strategy. An Accomplished Bluejay. Clouds of Birds. Two Little Captives. Helpless Pets. By Aleatross Mail. Bird Histories. A Crossbill in Mid Ocean. Birds at the Bath. City Birds. How I Learned to Love and not to Kill.	18 31 40 42 43 58 60 61 75 62 71 75
A Family on My Hands. Houses to Let The Gnatcatcher's Strategy. An Accomplished Bluejay. Clouds of Birds. Two Little Captives. Helpless Pets. By Aleatross Mail. Bird Histories	18 31 40 42 43 58 60 61 71 75 79 83
A Family on My Hands. Houses to Let The Gnatcatcher's Strategy. An Accomplished Bluejay. Clouds of Birds. Two Little Captives. Helpless Pets By Albatross Mail. Bird Histories	18 31 40 42 43 58 60 61 7, 105 62 71 75 79 83 8, 168
A Family on My Hands. Houses to Let The Gnatcatcher's Strategy. An Accomplished Bluejay. Clouds of Birds. Two Little Captives. Helpless Pets By Aleatross Mail. Bird Histories	18 31 40 42 43 58 60 61 7, 105 62 71 75 79 83 8, 168 87
A Family on My Hands. Houses to Let The Gnatcatcher's Strategy. An Accomplished Bluejay. Clouds of Birds. Two Little Captives. Helpless Pets By Albatross Mail Bird Histories	18 31 40 42 43 58 60 61 7, 105 62 71 75 79 83 8, 168 87 102
A FAMILY ON MY HANDS. HOUSES TO LET THE GNATCATCHER'S STRATEGY. AN ACCOMPLISHED BLUEJAY. CLOUDS OF BIRDS. TWO LITTLE CAPTIVES. HELPLESS PETS. BY ALBATROSS MAIL. BIRD HISTORIES. A CROSSBILL IN MID OCEAN. BIRDS AT THE BATH. CITY BIRDS. HOW I LEARNED TO LOVE AND NOT TO KILL A PLEA FOR OUR BIRDS. SOME CHARACTERISTIC BIRDS. SOME CHARACTERISTIC BIRDS. BLUEBIRD DICK. CROW AND ANTI CROW.	18 31 40 42 43 58 60 61 75 62 71 75 79 83 8, 168 87 102 108
A Family on My Hands. Houses to Let The Gnatcatcher's Strategy. An Accomplished Bluejay. Clouds of Birds. Two Little Captives. Helpless Pets By Albatross Mail. Bird Histories	18 31 40 42 43 58 60 61 75 79 83 87 102 108 109
A FAMILY ON MY HANDS. HOUSES TO LET THE GNATCATCHER'S STRATEGY. AN ACCOMPLISHED BLUEJAY. CLOUDS OF BIRDS. TWO LITTLE CAPTIVES. HELPLESS PETS. BY ALBATROSS MAIL. BIRD HISTORIES. A CROSSBILL IN MID OCEAN. BIRDS AT THE BATH. CITY BIRDS. HOW I LEARNED TO LOVE AND NOT TO KILL A PLEA FOR OUR BIRDS. SOME CHARACTERISTIC BIRDS. SOME CHARACTERISTIC BIRDS. BLUEBIRD DICK. CROW AND ANTI CROW.	18 31 40 42 43 58 60 61 75 79 83 87 102 108 109 109

Warner and Carrier D.	PAGE				
Wrens in a Coffee Pot	148				
Robin Lothario Swallows at Sea	152				
	153				
BIRD LEGENDS					
	169				
SHORE BIRDS.	171				
CLEVER BIRDS.	174				
Predatory Birds.	175				
THE SONG SPARROW.	193				
Notes from Pennsylvania	263				
	197				
	209				
	218				
	218				
	218				
	219				
LOON IN CAPTIVITY	219				
THE WOUNDED REDSTART	228				
THE BIRDS OF PRINKIPO ISLAND	238				
OUR WINTER BIRDS	249				
Mississippi Valley Bird Migration	257				
AUDUBON SOCIETY.					
THE AUDUBON NOTE BOOK	262				
A STORY OF THE IMAGINATION.					
- 46 A 25 27	262				
TALES AND SKETCHES.					
Charley's Wonderful Journeys	254				
Queen Honey Dew	163				
THE DOG AND THE UMBRELLA.	42				
THEN AND NOW	43				
Two Little Captives	58				
Helpless Pets	60				
GOLD BEAUTY	125				
MISCELLANEOUS.					
A Curious Floating Island.	43				
Ornithologists vs. Collectors	20				
A Young Ornithologist	21				
Clouds of Birds	42				
SAVING THE TREE	64				
T 0					
GENREAL SPINNER AND THE ENGLISH SPARROW	64				

	PAGE
FOR THE PROTECTION OF SMALL BIRDS	86
Nests	
AUDUBON WORK AMONG THE INDIANS	87
THE WHITE ANT	96
Unusual Nesting Sites	106
Birds in Disguise	, 151
Warren's Ledger.	108
No More Birds on Bonnets.	108
Seals, Sea Lions, Sea Gulls.	109
THE MOCKINGBIRD AND THE SPARROW	109
Birds on the Increase.	126
The Poet's Appeal	126
The "Magazine" as an Educator	126
A TRIP TO THE YOSEMITE VALLEY	150
SONG OF THE WHIPPOORWILL	152
A True Incident	153
SWALLOWS AT SEA	153
Bird Language	174
Man's Dependance on the Lower Animals	190
Re-introduction of Feather Millinery	207
Sketches of Montana	214
Report of Dr. Merriam	237
BIRD PORTRAITS	240
LETTER TO THE YOUNG MEMBERS OF THE AUDUBON SOCIETY.	240
Eva's Equestrianism	252
Mississippi Valley Bird Migration	257
English Press on Feather Millinery	264
Discontinuit (von	





A GREEN WOODPECKER.

ANOTHER OF THE EARLY DRAWINGS OF AUDUBON.

THE AUDUBON MAGAZINE.

Vol. II.

FEBRUARY, 1888.

No. 1.

AUDUBONIAN SKETCHES.

II.

SHORTLY after my articles appeared in *The Auk*, I was favored with a very kind letter from Mr. John Henry Gurney, père, of Northrepps, Norwich, England, who presented me with a fine and large photograph of Audubon, taken from the famous oil painting which hangs in the palace at St. Petersburg, Russia. This painting was evidently copied from a photograph of Audubon, the original of which latter is now in my possession, it having been presented to me with the utmost generosity by Mr. Henry K. Coale, of Chicago, the President of the Ridgway Ornithological Club of that city.

The original photograph is now before me, and I should judge from it that Audubon at the time it was taken must have been considerably over fifty years of age, as his hair is nearly white, while his side-whiskers are entirely so. He wears a loose, semistanding shirt collar to that garment, without any necktie. His black silk vest is unbuttoned half-way down from the top, and his coat is of the old-fashioned black broadcloth style, so commonly worn in his day by gentlemen, and especially by savants, advanced in years. He looks grandly out of the picture here, and the fine old face is one we can dwell upon for a long time without tiring, and our interest is sure to come back to us, as fresh as ever, when we regard the features. It is my intention at present to have an enlarged portrait made from this photograph some day. Mr. Coale tells me that this picture was presented to Dr. J. W. Velie by Mrs. Audubon herself, and Dr. Velie gave it to Mr. Coale.

I have a copy of the naturalist's life, written by his widow from his journal, which he kept up with more or less fullness during his rambles and journeys. It seems to me I have read the book through as many as a dozen times, and I am sure I am by no means through with it yet. We all know the little work, and revere it. Sometimes, however, we find little snatches here and there which Mrs. Audubon did not record, as they are the observations of others. Mr. Coale has collected and given me a few of these relics, mostly from periodicals and newspapers. One is a reprint, made by himself, from "Gleason's Pictorial," (Vol. III., No. 13, p. 196) and a very quaint old account it is, too, being illustrated by a coarse woodcut of Audubon, when I should say he was about thirty-three or thirty-four years of age.

Another account is published in a Chicago newspaper in August, 1876, by a gentleman living in Henderson, Ky. This writer tells us that, "As near as we can learn, Mr. Audubon moved to the Red Banks, or Henderson, about the year 1810 or 1812. He married Miss Louise [Lucy] Bakewell, of Louisville, who bore him two sons. Mrs. Audubon and the two sons accompanied

Mr. Audubon to his new home, and they all lived here until about the year 1822 or 1823. He was a Frenchman, and possessed of all the energy, fire and vim so characteristic of the French people, he soon embarked in business. His first enterprise was to open a grocery and dry-goods store in a little one-story log house which stood upon the corner of Main and First streets. He lived with his family in a little one-story brick building just in the rear of where the Odd-Fellows' Building now stands. Just where the Post Office is now located was a pond, in which he used to catch one or more turtles every day, which he used in making into his favorite dish, turtle soup. Shortly after this he operated a very large corn and flour mill at the foot of Second street. This mill was of very large capacity for those days; in fact, it would be regarded as of very respectable size these times. In this mill, upon the smooth surface of timbers, were to be found the most life-like paintings of birds, fowls and animals of every description which inhabited this country at that time. Mr. William T. Barrett has now, it is said, the first painting Audubon ever made of the woodpecker. The bird is represented as sitting upon the limb of an old tree, and listening to the familiar call of its partner. So perfect is the picture that persons have frequently mistaken it for a genuine stuffed bird.

"While Mr. Audubon was engaged in the milling business, it was his custom to bathe in the Ohio. This he continued until he became the most noted of all the swimmers who indulged in that delightful pastime. It is said of him that when the first steamboat landed at the town some of her machinery had become disarranged, and the boat had to remain here for several hours making necessary repairs. As might be expected upon so extraordinary an occasion as this, the people turned out *en masse* to see something new under the sun—the steamboat. A number of country visitors imagined the

thing had life in it. Mr. Audubon and other citizens were among the visitors, and during the time they were on board concluded they would indulge in their favorite amusement—swimming. They undressed and began to dive from the side of the vessel. Several members of the swimming party made successful dives from the inside of the vessel next to the bank, coming up on the outside. This was regarded as wonderful. Mr. Audubon walked to the bow of the boat, sprang into the river, and, after some time had elapsed, made his appearance below the stern, having gone clean under from one end to the other. This feat was regarded by all who witnessed it as a most remarkable and dangerous undertaking, and he was awarded the greatest praise for this unequaled performance. is said he did this several times during the time the boat lay at the bank. Mrs. Audubon was also a great swimmer. H. E. Rouse told us that he had frequently seen her go into the river at the foot of First street and swim to the Indiana shore. She dressed in a regular swimming costume, and was regarded by all who knew her as the next best to her husband, if not his equal.

"During Mr. Audubon's life in Henderson, he pursued the study of ornithology, frequently going to the woods and remaining there for two or three months at a visit. Upon one occasion he followed a hawk peculiar to this country, and so anxious was he to become the possessor of this bird, he pursued it for two or three days, finally succeeding in killing it. He was never known to stop for streams of any kind; he would swim rivers or creeks in pursuit of any game or bird he might be in search of. At one time he watched a flicker, or what is commonly known as a yellow-hammer, until he saw it go into a hole at the top of an old tree. He immediately climbed the tree and, running his hand into the hole to get the bird, caught hold of a huge black snake.

Pulling it out of the hole, and seeing what it was, he immediately let go, and he and the snake both fell to the ground. Mr. Audubon used to tell this story, with a good deal of humor, to the many who often wondered at the great risk he would take in pursuit of this great study."

When I was a child in arms, my father had his home on Washington Heights; and here the Audubons lived in the very house



MRS. J. J. AUDUBON.

next door to us, where my mother and her sister knew them all intimately.

It was thus that I came in possession of a number of very valuable Audubonian relics. These now consist chiefly of a letter of the naturalist, given me by his wife a short time before she died, she having done me the honor of having written my name across the end of it with her own hand. It was the last one she had in her possession, and as it is directed to Dr. Richard Harlan of Philadelphia, it must have reverted in some way back to the family. At all events, it contains in the P. S. the original description of Harlan's hawk (*B. harlani*), Audu-

bon having reopened the letter to announce its capture and dedication.

As I have elsewhere said, I also have in my possession the courteous little note from Mrs. Audubon presenting me with the above letter; it is dated from Scarsdale, Sept. 2, 1869, and in the postscript she begs that the tremulousness so evident in her handwriting may be overlooked, as she declares that she "is very blind I assure you."



JOHN WOODHOUSE AUDUBON.

This was some five years before Mrs. Audubon died, as we learn from a Louisville (Ky.) paper dated June 19, 1874, which makes the statement that "Mrs. Audubon, widow of the celebrated naturalist, John J. Audubon, died in Shelbyville, Kentucky, yesterday, aged 88. She was a lady of unusual attainments, and constant companion of her husband in his labors and travels, visiting the principal courts of Europe in his company. For many years past, since his death, she has lived with her relatives in this city and State."

Space will hardly admit of my giving here in full the contents of the Audubon letter in my possession, as the communication is quite a long one, and, moreover, it has already been published (see Nutt. Ornitho. Bull., Vol. V., 1880, pp. 202, 203).

My handful of relics is completed by two other pictures also given to my family by old Mrs. Audubon; one is a picture of herself taken in New York a few years before she died, and the other of her son John Woodhouse Audubon, taken at the same time. I have copied these by photography and here add them to the group shown in the illustrations.

Very often I try and place the living Audubon in our midst to-day and wonder to myself how he would regard matters ornithological of the present time. We must believe he was too much a lover of the woods and fields to have ever become contented with the closet study of ornithology, least of all with an "official" position under the Government to grind out his magnificent works of art, and his soul-inspiring descrip-

tions of them. No, we could never have caged an Audubon—never in the world. We undoubtedly would have had another great volume of plates with the text giving all the unfigured birds of our domains—west and in Alaska. Then I must think he would naturally have passed to the mammalian fauna, as his tastes were evidently in that direction.

We must also believe that he would have looked with favor upon the organization of the American Ornithologists' Union, and heartily lent his aid to the support of its present movements. Even more than this, I believe he would have hailed with welcome the organization of the Audubon Society, and done all in his power to further its ends. For be it said, notwithstanding the numerous birds Audubon must have taken in his long lifetime, he never took the life of a single one unless he had a very definite use for the specimen. Every line in his immortal work goes to prove that fact.

R. W. SHUFELDT.

HINTS TO AUDUBON WORKERS.*

FIFTY COMMON BIRDS AND HOW TO KNOW THEM.

IX.

SLATE-COLORED JUNCO; SNOWBIRD.

E ARLY in September you may have found the juncos, companies of little gray-robed monks and nuns, just emerging from the forests where they cloister during the summer months. Most of them nest as far north as the line from northern Maine to Alaska, but Mr. Chadbourne has found them "from the base to the bare rocky summits" of the White Mountains in July, with "newly fledged young;" and they also nest in the Catskills, the Adirondacks, and even in comparatively open deciduous woods on the borders of the Adirondacks.

But though they may build in your locality, as they do here, their habits, like those

* The Auk, April, 1887, Vol. IV., No. 2, p. 105.

of the chickadee, are greatly changed in summer, and you will take more than one casual walk through the woods before you discover them. They are no longer in flocks, but in pairs, and I consider myself fortunate if I can get a timid look from one from among the dead branches of a fallen treetop.

Early last May I was delighted to see a pair on the edge of the raspberry patch, but though they inspected the recesses of a pile of brush, seemed greatly interested in the nooks and crannies of an upturned root and reviewed the attractions of a pretty young hemlock that stood in a moss-grown swamp on the border of the patch, I suspect it was only a feint, and when they came to the grave business of house choosing, they followed

^{*} COPYRIGHT, 1888, BY FLORENCE A. MERRIAM.

family traditions and built under a stump, in a hole beneath the root of a tree, under an overhanging bank, or somewhere else on the ground, with a natural roof to keep off the rain. At all events, they left the raspberry patch, and with the exception of one or two that I heard giving their high-keyed woodsy trill in June, that was the last time I saw any of the family there until fall. Then they came out in time to meet the white-throats, and stayed till after the first snows.

One day in September, I found a number of them gathered around an old barn, some hopping about picking up seeds, and others sitting quietly on the boards and sticks that lay on the ground. Another day they and a number of whitethroats were by the side of the barn, picking up grain that had fallen from the threshing, and not satisfied with what they could find there, some of them flew up on the sill of a small square window that had been left open, and hopping along disappeared from our sight in the dark barn. As the weather grew colder they came, as they do every spring and fall, to see what they could find to eat by the side of the house. Here, they raise their heads with quiet curiosity when you approach, and always seem very gentle, trustful birds, but it is said that they show much caution as well as intelligence in eluding their enemies, and are among the most difficult birds to snare.

The call of the junco is a chip that sounds like a thin smack. Of its songs, Mr. Bicknell says: "The junco has two very different songs; a simple trill, somewhat similar to that of the chipping sparrow; and a faint whispering warble, usually much broken but not without sweetness, and sometimes continuing intermittently for many minutes."

Among the notes of Miss H. H. Boardman, a St. Paul observer, I find, under date of April 7, 1887: "At 8 A. M. saw quantities of juncos, from one of whom a tiny trill, more like a shimmer, quite clear and sweet, about eight notes, and then up, crooning to

itself;" and "April 15, at sunrise, 5:15, a tree full of juncos, twenty or thirty, all singing this peculiar sweet twitter in different tones. The effect of a whole flock is sweet and harmonious."

In an old number of the Naturalist, Mr. Lockwood gave an interesting description of the habits of a flock of snowbirds that visited him in New Jersey. He says: "In easy view from my library windows is a spot in the headland of the old orchard, where last autumn grew a tall Phytolacca decandra. The tip of the dead plant is but just exposed, and that is hint enough to the little fellows that the dried currant-like berries of the pokewort are to be found in a natural cache under the snow. The way in which a group of five or six birds keep at the spot would indicate that the placer 'pans out well.' How they do dig down into the snow! Dig? Yes, though, very unbirdlike, that is the right word, for it is altogether unlike scratching. Its method of mining, for a bird, seems to me to be original. Our Junco hyemalis is a hopper, not a runner, and scratching is, as a rule, not an accomplishment of the hopper family. The bird stiffens out its toes, then makes a jumping shove forward and upward, thus lifting and flirting the snow. The movement is of the whole body, and the action is scooping, not unlike that of a ditcher. It is not a shuffling motion, for it demands too much dexterity, but a true shoveling movement. Like the post-hole digger's shovel with its short blade and long handle, the middle toe of junco is shorter than its tarsus.

"Soon this natural cache was exhausted, and a deep, wide excavation with a small entrance was the result of their patient digging. It was truly a snow cavern. The birds soon learned to feed from a supply put at their service on the window sill. Finding so good a commissariat, they sojourned with us a number of days, the little bevy of not more than seven, keeping always

together, as if by a family compact. Indeed, this is a pretty domestic feature of our Eastern snowbird. Some twenty-five feet from our study windows is a beautiful copse of *Thuja occidentalis*, or arbor vitæ * * * the trees are high and the foliage dense, * * * Hither come our little birds when the day's foraging is done—this is their nightly 'covert from storm and rain'; while strange to tell, their snow dugout is made to serve as a cosy asylum from the cutting wind by day." (*American Naturalist*, Vol. XV., No. 7, P. 519–520.)

He then goes on to say: "Our Eastern snowbird does not hold together long in large flocks, but does like to keep together in small bevies, or family groups. Is a good deed contagious? These tiny things have caught the knack of charity among themselves! There is a poor little snowbird on a rail; something ails it, for a stalwart junco is carrying food and feeding it with nursely tenderness. To and fro goes the noble little fellow, until the hunger of its nursling is appeased. The bird is in some way lame of wing; and its benefactor knows all about it * * a double question is under consideration, namely, hunger and safety, demanding foresight and strategy. If it would, the crippled bird could go to the window sill and help itself; for it has managed to keep up with the family flock, but with painful effort. These two words lighten up the whole case. Even the stalwarts come to the place of feeding not without circumspection and some distrust * * * hence this thoughtful commiseration —that crippled bird must be allowed a position 'surveying vantage.'" (American Naturalist, Vol. XV., No. 7, p. 519-521, July, 1881.

BLUEJAY.

The bluejay always comes with a dash and a flourish. As Thoreau says, he "blows the trumpet of winter." Unlike the chickadee, whose prevailing tints match the winter sky, and whose gentle day-day-day chimes with the softly falling snows, the blueiay would wake the world up. "clarionet" sounds over the villages asleep in the snow drifts, as if it would rouse even the smoke that drowses over their white roofs. He brings the vigor and color of winter. He would send the shivering stayat-homes jingling merrily over the fields, and start the children coasting down the Wake-up, wake-up, come-out, come-out he calls, and blows a blast to show what winter's good for. And so he flashes about. and screams and scolds till we crawl to the window to look at him. Ha! what a handsome fellow! He has found the breakfast hung on the tree for him and clings to it, pecking away with the appetite of a Greenlander. Not a hint of winter in his coloring! See his purplish back, and the exquisite cobalt blue, touched off with black and white on his wings and tail. How distinguished he looks with his dark necklace and handsome blue crest! There! he is off again, and before we think where he is going we hear the echo of his rousing phephay, phe-phay from the depths of the woods.

Speaking of the winter birds of Massachusetts, Mr. Allen wrote in 1867: "Among our more familiar resident birds, there are but few species that seem as numerous in winter as at other seasons; of these the bluejay (Cyanura cristata, Swains.) is a prominent example. Though unusually social in his disposition, he is yet hardly gregarious. The noisy screams of small scattered parties reach us from the swamps and thickets almost daily, and in the severer weather, individuals make frequent excursions to the orchard and farmer's cribs of corn, the few grains they pilfer being amply paid for in the destruction of thousands of the eggs of the noxious tent-caterpillar.*

In 1881, Mr. Charles Aldrich wrote from *American Naturalist, Vol. I., No. 1, p. 45, March. 1867.

Webster City, Iowa: "None of our winter birds are so social as the bluejays. We see them every day during our long, cold winters. Our barnyards are their favorite resorts, where they walk about very familiarly among the poultry and domestic animals, feeding upon the scattered or half digested corn. Last night (Jan. 6), while I was passing a straw stack, a jay went whirling out of a small hole into which it had crawled a foot or more. This morning, as I write, the mercury is down to 24, so I suppose my jay had made the best possible provision to protect himself from the approaching low temperature. These birds and our little chickadees seem able to endure such extreme cold better than any others that remain with us all the year round. Soon after sunrise on any of these cold, clear mornings, they can be heard merrily chirping in the neighboring groves and thickets."*

In another number of the Naturalist he says: "So tame are they here, the little daughter of a friend of mine saw a bluejay very busily pecking at some object, doubtless an ear of corn. Approaching stealthily, she clapped her hands upon his sides and captured him! It is amusing to see them eat a kernel of our large western corn. They cannot swallow the grains whole, and are compelled to break them into two or more pieces. This they do with powerful strokes of their bills, while holding the grain upon the ground or other hard surface. with one foot. These strokes come down as systematically as a blacksmith hits a hot iron with his hammer! Often three or four blows are needed to divide the object, so it can be swallowed and the bird looks round at every stroke to see if the coast is clear. But back in western New York and Pennsylvania, they were shy and secretive, living for the most part in the grand old woods. It seems to me this difference in habits may be largely due to the scarcity of timber in

*American Naturalist, Vol. XV., No. 4, p. 319, April, 1881.

this region, which makes it a necessity for them to live near the abodes of men. As population increases, their habits of familiarity are increased, and so the bluejay has become one of the tamest and most domestic of our Iowa birds."*

In this region the bluejay is an irregular guest. Sometimes he is here for only a few days in the fall; often he will visit us when the hawks return in the spring, and tease the young observer by imitating the redtail's cry. Then, if the fancy takes him, he will spend the winter with us, showing comparatively little of the timidity Mr. Aldrich found in those of western New York.

Last fall they were here for some time, but when I was congratulating myself on having them here for the winter they left, and did not return till the middle of January. Then one of them suddenly appeared on a tree in front of the kitchen window. He seemed to have been there before, for he flew straight down to the corn boxes. The gray squirrels had eaten out the sweetest part of the kernels and he seemed dissatisfied with what they had left, dropping several of the pieces after he had picked them up. But after swallowing a few kernels he took three or four in his bill and flew up in a maple. There he must have deposited some of them in a crotch at the body of the tree, for after he had broken one in two under his claw-striking it with sledge-hammer blows, as Mr. Aldrich describes it—he went back to the crotch, picked up something, flew back on the branch, and went through the process over again. The second time he flew down to the corn boxes he did the same thing-ate two or three kernels, and then filled his bill full and flew off-this time out of sight. What a good business man he would make! All his motions are like this unique performance, time-saving, decided, direct. Once during the morning he flew down to the boxes

^{*} American Naturalist, Vol. XV., No. 8, p. 654-655, August, 1881.

from the tree directly over them, and came so straight he looked as if he were falling through the air. He did not seem particularly hungry, for the suet did not please him at all, and the corn was only partly satisfactory. He pecked at the bark of the trees in an indifferent way, too, but I thought he was drinking with more gusto. He seemed to be catching the raindrops that were running down the sides of the trees and filling the crevices of the bark.

After he had been away for a few minutes and the gray squirrels had settled down comfortably for breakfast, he came dashing round the corner in such a hurry he almost flew into the squirrel that had taken possession of the lower box. The first thing I saw was a confusion of blue feathers and gray fur, and then a blue jay flying off to the evergreen, and a gray squirrel shaking his tail excitedly and starting from one side to the other of the box trying to collect his wits. By this time the bluejay had recovered from his surprise, and seeing that it was only a squirrel, hopped about in the spruce as full of business as if the collision had been planned. Not so with the poor squirrel! He jumped up on the highest box, stretching straight up on his hind legs, his heart beating against his sides, his tail hanging down dejectedly, his fore paws pressed against his breast, and his ears standing straight up as he looked off toward the spruce where the bluejay had gone. Gradually the questioning wonder on his face changed to the most comical look of bewilderment. Could that big bird flying about as if nothing had happened be the thing that flew into him, or had he gone to sleep over his corn and had a bad dream? He gradually settled down on his haunches with an expression of utter, inane confusion and finally turned back into his corn box, a complete contrast to the clear-headed blue-

But it is not only the squirrels that the bluejays dine with, for one day last winter the little three-year-old came running out of the dining room in great excitement crying, "Oh, grandpa! come quick! There are three partridges, and one of them is a bluejay!"

Indeed, the other day the bluejays quite took possession of the corn barrels that are the especial property of the partridges. They stand under the branches of a Norway spruce on either side of a snow-shoe path, that runs from the house, and the handsome birds made a very pretty picture flying about and sitting on the barrels, the green of the boughs bringing out the blue of their coats.

But the real home of the bluejay is in dense coniferous forests like the Adirondacks. There we find him with all his family. I shall never forget seeing a flock of the jays on Black Mountain. From the top of the mountain the wilderness looked like a sea of forest-clad hills, with an occasional reef outlined by surf, for the largest lakes seemed like silver tracery in the vast expanse of forest. The impressive stillness was only broken by the rare cries of a pair of hawks that circled over the mountain, for the most part they soared, silent as the wilderness below them. Coming down the mountain into the midst of the "forest primeval," where the majestic hemlocks towered straight toward the sky, and their massive knotted roots bound down the granite boulders that showed on the mountain side-there we found the blue jays in their home. A flock of them lived there together, feeding on wild berries and beechnuts, sporting among the ferns and mosses, and drinking from the brook that babbled along near the trail. What a wonderful home our handsome birds had chosen! But the memory of the spot is hideous. Unmoved by the beauty of the scene, to which the bluejays gave color and life; unawed by the benedicite of the hemlocks; betraying the trust of the friendly birds, the boy of the party crept into their very home and shot down one after another of the family as they stood resistless before him. To-day the pitiful lament of the brave old birds haunt me, for, forgetting to fear for themselves, those who were left flew about in wild distress, and their cries of almost human suffering reached us long after we had left the desecrated spot.

CROSSBILLS.

Last November, one of the commonest sounds heard on my walks was an odd metallic kimp, kimp, kimp, coming from a flock of crossbills far up in the air. They were often so high that I could not see them, and one day several flocks passed over my head, affording only a glimpse of black dots for them all. Their note often came from the hemlocks back in the woods, and on Thanksgiving morning I had the satisfaction of seeing the noisy strangers.

They had come out in the clearing, and lighted near a milk house, some on a tree and others on the ground. I crept up as noiselessly as the crusty snow would allow, and screening myself behind another building watched them for some time. They seemed nervous, for every few minutes they started up simultaneously with a whirr, flew about a few seconds and then settled down again. When they were resting, those that were not chattering, warbled to themselves in a sweet undertone, but when a new company joined their ranks they all began jabbering, and it was a grave question if any of them could hear what they were asking, or their neighbors trying to tell. Then as they broke up into groups and went wheeling about in the air, the glittering gilt deer on top of a barn a few rods away attracted them, and some of them lit on the horns a moment in passing. Several squads flew away, and as the confusion decreased the others grew less restless, and twenty or thirty flew down under the milk house door and began picking up what they could find on the stones.

Such a mixture of colors! The old gentlemen were the handsomest, being some shade of red, while their wives and children were olivaceous or grayish. They seemed like a shifting kaleidoscope of colors, as they hopped about busily hunting for food.

Among them were a few pine finches, and I thought that I heard some goldfinches with those that passed over.

I got the pretty visitors a basket of grain, and scattered it on the crust for them, but they seemed to prefer cone seeds, for they soon flew over to the spruces.

Mr. Allen says: "The crossbills, by the great strength of their maxillary muscles, and their strong oppositely curved mandibles, are able to pry open the tightly appressed scales of the fir cones, and to extract at pleasure the oily seeds, which other birds equally fond of, have to wait for the elements to release.*

The crossed bills that Mr. Allen refers to, and from which the birds are named, are accounted for by the old legend which says the merciful birds tried to pull the nails from the cross, and in doing so twisted their bills in such a way that they will always bear the symbol of their good deed.

In speaking of the occurrence of the crossbills in South Carolina, Mr. Wayne says in general: "They go in flocks of from six to forty individuals, and fly in the manner of the American goldfinch (*Spinus tristis*), but their flight is generally very high and greatly protracted; their note while on wing is very similar to the cry of young chickens. They always alight in the tops of the pines, and each individual then gets a burr, to see if it contains 'mast'. I have seen as many as three birds on one burr."†

The crossbills are very erratic in habit, and wander over large areas where they do not remain to build. They nest throughout

* American Naturalist, Vol. I., No. 1, p. 44-5, March, 1867.

† The Auk, Vol. IV., No. 4, p. 288, October, 1887.

the coniferous forests of the northern United States and Canada, and in mountains of the Southern States, notably in North Carolina, Tennessee, and Kentucky.

Mr. Bicknell describes a nest he found at Riverdale, N. Y., in 1876. He says: "On April 22 I noticed a pair building near the top of a red cedar, about eighteen feet from

the ground. The nest, April 30, contained three eggs, and was composed of strips of cedar bark, dried grass, and stems of the Norway spruce, and was lined with horse-hair, feathers, dried grass, and fibrous roots. The eggs were * * a very light blue, slightly sprinkled and blotched at the large end with dark purple.'*

FLORENCE A. MERRIAM.

CHARLEY'S WONDERFUL JOURNEYS.

JOURNEY VI.

"COME here, Charley," said the dog, "there's a gray squirrel up in this maple tree, and I want to see you bark him."

"But I wouldn't like to hurt the poor little squirrel," said Charley.

"Oh, I didn't mean you to hurt him," said the dog; "I only meant for you to split the branch he's standing on, with your arrow, and catch him by the foot, and then we can have some fun with him."

Charley drew his bow and drove the arrow clean through the branch, and as the rift closed, he saw that the squirrel was caught.

"Keep quiet," said he, "I'll come up and set you free in a minute, and then we'll have some fun."

Then Charley began to climb the tree, going up quite easily like a squirrel, and when he came to the branches, he stood on one and pulled himself up to the next, then he stood on that and pulled himself up to another, and kept on going up and up, such a long time that he forgot all about the squirrel, and at last when he was thinking about nothing in particular, he heard a voice just above him saying, impatiently, "Make haste, Charley, and unlock the bracelet; I hope you've brought the key with you."

Charley looked up and saw a little bear

fastened to the branch overhead. He was not at all surprised or frightened. Nothing ever surprised Charley. On the contrary, he seemed to recollect that he had been traveling with a key in his pocket, on purpose to set the bear free, and as soon as he reached him he took out his key, and set the delighted bear at liberty.

"I knew you would come," said he, "and I'm so glad; they didn't want me to go to the ball, but they pretended they did, and told me I must wear my bracelets, and when I put them on, they locked me to the tree, and away they went to the bear garden without me. Now let's come along and have a dance."

So Charley and the little bear trotted off, until at last they came to a beautiful garden, with a fence of tall, straight trees growing all round it.

"But this isn't a bear garden," said Charley; "this is a flower garden."

"Oh, yes," said the little bear, "it's a flower garden before you begin, but after you've finished it's a right out bear garden. Here they all are!"

From all sides the bears came trooping into the bear garden, the younger couples catching each other as they met, and whirling around in a waltz, or dancing singly.

* American Naturalist, Vol. X., No. 4, p. 237, April, 1876.

Charley and the little bear embraced and began whirling round too.

"Now stop your fooling," shouted one of the oldest bears, "and select your partners for a country dance; keep time to the music and dance gracefully and decorously." The sets were formed; the old bear retired to a corner, and with no other instruments than his own pipes started the tune.

It was not a very soft or sweet music, something like the bagpipes, perhaps, but it was a very good tune for bears to dance to, and Charley went through the figures, and entered into the spirit of the fun with as much zest as any of them.

During the dance, Charley noticed that besides the musical bear in one corner, there was another bear in another corner, who never danced, but stood looking quite miserable with his hand to his head.

Charley knew at once that this must be the bear with a sore head, but all the same, he wanted to ask him, and when the first dance was over, and the bears linked arms and strolled about chatting to each other, Charley approached the solitary bear, and asked him why he did not dance.

"Oh, I never dance," said he; "I'm the bear with the sore head."

"I thought so," said Charley, "but how did you come to get a sore head?"

"You needn't come asking such questions as that," said the bear, "nobody ever asked such a thing before, and that's two questions you've asked me already."

"But how do you know you've got a sore head?" persisted Charley.

"I give it up," said the bear; "now tell me."

"I can't tell you," said Charley, "because I don't know."

"Don't know!" snarled the bear, furiously, "then what did you come asking such puzzlers for? You must know and you've got to tell me. Come here, all of you," he shouted, "and make him tell me."

"What is it?" asked all the bears in cho-

rus, as they came running at his summons.

The little bear caught Charley and whisked him out of the crowd, while the bear with the sore head was telling his story.

"Oh, if you gave it up, he must tell," they all cried in a breath. "Where is he?"

"Here, eat this quickly," said the little bear, thrusting a nut in Charley's mouth. He ate another himself, and the next moment they were both turned into squirrels, and ran up one of the fence trees, and turned round to see the fun.

You should just have seen the look of astonishment on the bears' faces when Charley and his partner suddenly disappeared from before their eyes. They stopped, looked at each other, and five or six of them couldn't help asking, "Where is he?" "I give it up, I give it up," cried the others all in a breath, "and now you've got to tell us."

The bears who had asked the question made a rush for the fence, but the others were on them in an instant; the next moment they were rolling over and over, biting, growling, clawing, and making things lively in general.

"I told you they'd make a bear garden of it before they'd done," said the squirrel, laughing. Now let's be off home, it must be getting late." * * *

"A pretty time of night to be coming home," said the squirrel's wife as they reached the nest. "I think you might stay at home with your family, and not keep me sitting up here until after midnight."

"I should have been home long ago," said the squirrel, "but I found this poor fellow here running into danger, and just came in time to save him from being torn to pieces by bears."

"Well, what business was it of yours if he chose to run into danger? You're very fond of doing good for people you know nothing about, and neglecting your own family. Let everybody mind their own business, say I, and if folks choose to run into danger let them run out of it again."

"I am really very sorry, ma'am, that I have been the means of causing you so much uneasiness," said Charley; "and now if you'll kindly turn me back again, I'll go home at once."

"You are certainly very polite and civil spoken," said the squirrel's wife, "and now that I look at you closely I see that you're only a changeling. Well, it's late now and you had better come into the nest with us to-night."

"You are very kind," said Charley, "and I am sure you have a good heart, but I would like to be changed back again and go home."

"Whew!" said the squirrel, "that's more than I can do, and as to a squirrel going all that distance it's out of the question. I have it; the rabbit has a book of magic, and he can tell you how to do it. It isn't far," said the squirrel, turning to his wife, "and I'll just step over with him and be back in a minute."

"I am sure you must be tired," said the squirrel's wife, now completely mollified, "you go to bed, and I'll run over to the rabbits with him." But the squirrel wouldn't hear of this, and Charley being anxious, the two set off at once and soon reached the hole, and entered the rabbits' house, where they found Mrs. Rabbit sitting by the kitchen fire, with the table all laid for supper.

"You quite startled me!" said she, "I'm so nervous sitting here alone o'nights, and my husband stays out so late!"

"Nothing easier," said she, when the squirrel made known their business, "and how fortunate my husband is so late, or he would have eaten all the stewed dandelions, and you must eat that if you want to be turned into a rabbit."

"But I don't want to be turned into a rabbit," said Charley, I want to be turned into myself again and go home."

"I can't do that," said Mrs. Rabbit, "I must turn you into a rabbit first, and then I can tell you how to regain your own shape. Here, sit up at the table, the dandelions are all ready."

"Well, I must be off," said the squirrel, and away he scampered.

Charley tasted the dandelions. "Oh, how nasty it is," said he; "I don't like that."

"It's only the first mouthful that's so bad," said Mrs. Rabbit, eyeing him with interest. "Swallow one good mouthful, and after that it will taste better."

Charley forced down a mouthful, making a wry face at first, but when it was down he smacked his lips and took another mouthful. "Why, it's simply delicious," said he, and he set to work to finish the dish.

Mrs. Rabbit laughed, for Charley was already turned into a rabbit without knowing it.

"Come here," she said, "and let me look at you. Why, what a pretty rabbit you make. A white rabbit with blue eyes, I declare. Why, you're just lovely! I don't think you're as tall as I am; stand up and measure."

She was so soft and nice as she nestled close to Charley, and then scampered off to entice him to play with her; but Charley was anxious to get home, and asked her what he must do next to regain his own shape.

"I don't just remember," said she, "I have it in a book up there, but it's difficult to read by this light."

But Charley was impatient, so she took down the book and turned over the leaves (they were cabbage leaves). "Here it is," said she, as she came to the place, "you must cross running water, and then you'll regain your own shape."

"Oh, I know," said Charley, "there is the creek that runs down to the mill. Thank you so much, I'll be off now."

"You surely wouldn't venture out at this time of night," said Mrs. Rabbit, who look-

ed really alarmed; "there are foxes about, and it's downright dangerous for rabbits. You had better stay here to-night; I don't know when my husband will be home."

But Charley was inflexible, and although Mrs. Rabbit fondled and coaxed him to stay, he broke away from her, and bounded off toward home.

The scamper over the green grass was delightful; Charley never enjoyed a run more in his life; but suddenly his quick ear caught a slight rustling in a little tuft of long grass, a little ahead and to his left. He swerved off, and the next moment a fox made a dash at him. He bounded forward, the fox missed his spring, and away went Charley at top speed for the creek, the fox Charley reached the creek, after him. sprang in, and found himself in his own proper shape, up to his knees in water. He was not frightened now, but oh, his feet were cold! All the same he couldn't help laughing at the baffled fox.

"Were you looking for anything?" asked Charley.

"Oh no, nothing particular," said the fox. I saw something white glance by, and just ran up to see what it was. Did you notice it? Something like a white rabbit it looked to me."

"I give it up," said Charley. "Do tell."

"Oh, you've been *there*, have you?" said the fox, as he turned tail, and scampered off as fast as his legs would carry him.

Charley tried to laugh, but his teeth were chattering with cold; he hitched up his pants, and made another step forward, and went in up to his middle. The cold was so intense that he awoke. The gray dawn was just breaking, and as Charley sat up in bed and looked round to make sure that he was at home, he saw his naked feet sticking out, and found that he had pulled all the bed clothes up above his middle. He straightened them out as well as he could without getting up, and then drew up his knees and lay awake, recalling all the adventures of the night, until the sun rose high, and his mother came to give him his morning kiss and call him for breakfast.

C. F. AMERY.

THE ENGLISH SPARROW DISCUSSED.

ENERAL SPINNER'S "Earnest Appeared in our November number, would have been lauded to the echo, if he had omitted all allusion to the European sparrow, but in drawing the line at that impudent little marauder he has stirred up a considerable measure of dissent, for the sparrow is by no means without friends. We have quite a number of interesting communications on the subject, one of which was addressed by the writer to General Spinner personally, with a request to him to have it published.

The letter has consequently found its way to our columns, and it will be seen that the General, neither softened nor convinced,

has double-shotted his guns, and ranged himself in line of battle.

After the smoke of the conflict shall have cleared away, it will be for our readers to determine to which side the balance of victory inclines.

The English sparrow himself, we have ascertained, takes no stock in the discussion; he has come to stay, and will pursue the even tenor of his way, undismayed by the screaming of the American eagle.

From Lydia L. A. Very, to General F. E. Spinner.

No. 154 Federal Street, Salem, Mass.

DEAR SIR—I was reading (with pleasure) your remarks and advice to the boys to spare the birds, when I came to your ending, advising them to kill the poor little English (European more properly)

sparrow. We who have watched the sparrows from the first year of their introduction into the country know them to be useful and interesting. They have freed our trees from canker worms (we do not tar them now), they eat the pupa of the caterpillars (we seldom see a caterpillar now), they destroy the clothes moth in embryo, and they are busy scavengers of our public streets and yards. They are constantly at work, winter as well as summer. They do not drive away our native birds. The foresters in the Washington, New York, Boston and Philadelphia public gardens and commons, all give their testimony to the contrary, saying that robins, blue birds and yellow birds, and others, build by the side of them. The scarcity of native birds is owing to men and boys shooting them, and women's cruelty in wearing them on hats and bonnets.

Besides this, every school boy has to make a collection of birds' eggs, and some take pleasure in their wanton destruction.

The only thing I have observed, that most who complain of them have against the sparrow is, they soil the houses, but I think it ill becomes man to complain of any animal for being dirty or quarrelsome or thievish; let him look at his own species. Besides and above all the benefits the sparrows confer on us is this: they have comforted, amused, and interested the old, the young, and the sick. It has been one of our greatest pleasures (in our loneliness and bereavement) to watch and feed them.

All birds have their enemies who wish their destruction. It was not many years ago that some one in London complained of the numerous doves, and tried to effect their destruction. But it was found that some kind-hearted person had left a fund for them to be fed twice a day at Guild Hall, and this prevented it.

In West Peabody there is a farmer who kills robins, and hires boys to do so. His old father (I am happy to say he is dead now) used to go round and punch the bottoms of the robins' nests after they had built them. In some places they make pies of robins. I should as soon think of eating a piece of a baby!

In old times crows were thought nothing of, and every one shot them at will. Now, there is a law in England to protect them, as they kill hard-shelled bugs the smaller birds cannot.

Now I hope you will be convinced a little, that when God made the sparrows, He made them for some purpose, and if we do not know it, it only shows our ignorance. These European sparrows are the ones the Saviour loved and noticed when he pointed to them and said, "Your heavenly father cares too for them."

I am told by English people that they value the sparrow next to the robin, and their numerous sparrows are the reasons they have such heavy crops.

If you would oblige a lady, I wish you would have this published in some paper your way, to let people know the little sparrow has friends.

General Spinner's Rejoinder.

Pablo Beach, Florida, Dec. 19, 1887.

DEAR LADY-Your very interesting letter, of the 11th instant, has been received. While your sympathy for the feathered biped brigand, the English sparrow, does you credit, I think it is misplaced. I can only account for it, on the supposition that you, like many others of your sex, have a perverted sympathy for the worst kind of criminals. Place a bloody red-handed murderer in prison, and directly you will see a stream of refined ladies passing to the murderer's cell, bearing to him all kinds of dainties, choice flowers, and a profusion of misdirected sentimental sympathy. They pass by the suffering poor; they have no more sympathy for these than they would have for the oriole and the blue bird, that are persecuted by the merciless European sparrow.

You do well to call him the European sparrow, for he is the pest of the whole continent of Europe. He leaves England early in the season, and joins his fellow marauders on the continent. By the agriculturists of all Europe, and of our own country as well, he is considered the greatest of pests, and to them is a positive nuisance.

You have discovered virtues in this vagabond of a bird that naturalists have strangely failed to see,

We in America have sparrows, "to the manor born," that are insectivorous; but, the fraud of a bird, that we are considering, is strictly granivorous. If your birds in Salem are as you describe them to be, they differ from any that I have observed. They must be witches, and under the traditional law of your town should be burned. It is, however, no doubt true, that those sparrows that live in cities behave themselves better than do their rustic cousins. They, of the country, despoil the grainfields and the gardens, while your pets in the cities riot on horse-droppings. There is no accounting for tastes.

But you are not at all singular in your estimate of the city sparrow. He evidently differs from the fellow in the country. I have a young lady friend and correspondent, who is a naturalist, and who has made birds her especial study, who in regard to what I had written concerning the English sparrow, wrote me as follows:

"As to the sparrow—yes. I am a murderer in theory, and here in the country I would be one in practice. It is only in places like New York that my heart warms to the 'marauder.' Honestly, now, don't you relent when he flies down by your side, when all Broadway is hurrying by? You may think me sentimental, but I own that I am glad to see him there, and I don't want to poison him at all." Perhaps this is the true state of the case. The city sparrow is a genteel loafer, while his country cousins are unmitigated curses.

I wonder have you a garden, and have you tried to grow a bed of early peas? If you have, you have probably noticed that the rascals have some way of communicating the fact to all their fellows for miles around, and soon you will find that they had the generosity to leave the empty pods for your share of the crop.

I have been informed that some States have passed laws making it a penal offense to harbor these marauding tramps. I confess that I favor such a law.

I will not gainsay your estimate of man, that he is dirty, quarrelsome and thievish, for he is ranked as the chief brute of creation. But then, woman be-

longs to the same species, and she is the man's mother.

The doves that you mention, while they are not quarrelsome, are, so far as filthiness and thievishness are concerned, even worse than the English sparrow. I have known much sickness, and even death, to have occurred, in consequence of the use of rain water, shed from roofs that had been soiled by these unclean birds.

You say that the English attribute their good crops to the presence of numerous sparrows. Are you sure these English people were not quizzing you: that instead of the crops of the farms, did they not mean that the crops of the sparrows were so heavy?

You say God made these sparrows for a purpose; now, while I will not dispute your proposition, I beg to remind you that the same may be said of skunks, wolves, rattlesnakes, scorpions, fleas, mosquitoes, and thousands of other animated nuisances.

Very respectfully yours,

F. E. SPINNER.

Lydia L. A. Very, 154 Federal Street, Salem, Mass.



bon temple, for in spite of his decided attitude toward that debatable bird, and bone of contention—the English sparrow—he is a very warm supporter of the Audubon movement.

E are gratified at being able to present the readers of the Audubus with a portrait of "the watch dog of the Treasury." General Spinner well deserves a niche in the Audu-

Q. D. Commer

A S I stood leaning over the garden A fence one Sabbath evening, admiring a stretch of billowy meadow beyond, my attention was drawn to a startled bird which fluttered from the grasses a few feet distant, and as it alighted on the fence near by, I recognized it as the black-throated bunting (Euspiza americana). Suspecting a nest, I made search and discovered one in a thick bunch of clover and timothy, fastened to the tall millet clover stems, about one foot from the ground, and containing five beautiful eggs. A neat little home it was, scented with the breath of the blossoming clover, and swaving gently with every passing breeze; it reminded me of the old nursery rhyme, of "Rock-a-by babies all in the tree top," etc.; indeed I used to be under considerable apprehension lest the "cradle should fall," and always visited it after each storm, but this calamity did not overtake them.

Little Mabel was with me when I discovered the nest, and we agreed that it should be a secret between ourselves; that even master Charlie should not be told, because the "collector" of the family had offered him "a great big nickle" for every nest he discovered, and the temptation might be too great for him; nevertheless, the "collector" did surmise that we had found it, and had the effrontery to attempt to bribe us into telling him; we had the moral courage to resist him, however.

Well, in the course of a week or ten days, there were five little birdies in the nest, and then we did not hesitate to inform the "collector," and, to his credit be it said, he soon became as much interested in the little family as we, and very interesting it was, to watch the parent birds flit back and forth on their ceaseless errands to obtain food for the little hungry mouths. I used to pity them sometimes, they had so much to do, but they seemed very happy nevertheless, and would steal a moment every

now and then to alight on the fence, at a safe distance from the nest, you may be sure, and regale us with their merry Look at me! see! see! Look at me! see! see! see!

One day, when the birdies were perhaps a week old, little Mabel came running in with the startling intelligence that the reaper was at work cutting the grasses in the field where our nestlings were hidden. dismay at this announcement can easily be imagined; the parent birds themselves could hardly have been more distressed. Had I saved them from the unsparing hand of the collector, only to have them meet a far worse fate? I simply could not, would not see them cut in pieces by the cruel sickle; and so, painful as the duty was, we tore the little nest from its fastenings, and carried it to a place of safety. The reaper did its work; the sheltering grasses were leveled to the earth, but the nestlings were unharmed.

We carried the nest, as nearly as we could determine, to its former place, made a wall of hay around it, and stood off to watch if the parent birds, which in the meantime had been flitting hither and thither, sweeping low over the place where the nest had been, and evincing the greatest anxiety and distress, would find it. In a few moments, however, the mother bird had discovered her children, and joyfully and hastily settled down upon them. And for ourselves, we were inexpressibly glad that our adopted family had escaped so great a peril. But dangers equally great awaited them. From its exposed position the nest could be easily discovered by the bad boys of the neighborhood; besides there were huge turkeys now stalking these meadows who would "gobble them up" on sight like so many grasshoppers; to say nothing of the dogs and cats and other enemies. What to do I did not know, and in sore dilemma I consulted the

"collector," who had become quite as much interested in the little family as myself. He advised me to move them a few feet at a time until I had them under the shelter of a fence some twenty feet distant. But before this could be accomplished, their hiding place had been discovered by two of the worst boys in Coralville.

I felt that it was all over with my protegés then, but I would make one last efort for their lives. So, calling the boys to me, we had a conversation something as follows:

"Now Joe," I said, addressing myself to the elder, "these little birds have had and are likely to have a perilous time of it; and I am going to ask you to help me protect them from bad boys and other enemies, if you will. It is very interesting to watch them grow and feather out, and you may come and look at them every day if you like. Of course you will not hurt them, will you? I know Jesse will not." "No," said Joe, "I will not touch 'em, I told Mabel I would, but I was just a foolin', 'an I'd just like to see a boy try to molest 'em, I bet he wouldn't do it again." "Course I won't hurt 'em," Jesse said. Satisfied that the birds had two valuable champions in those whom I had naturally expected would be their greatest enemies, I resolved to leave them where they were for the present. In about half an hour I heard an outcry, and voices raised in angry altercation. Stepping out to ascertain the cause, I beheld these two boys most unceremoniously, not to say savagely, conducting a little redhaired, freckle-faced culprit out of the grounds. Not until they had taken him safely beyond temptation and all the fences, did they vouchsafe me a word of explanation. "What do you s'pose he was doin'?" said Joe. "He was a sneakin' up and crawlin' along under the fence to try to get at them birds, that is what he was; but I give it to 'im, I did; he won't try it again, he won't." He did not try it again; nor

did any other boy dare venture near those birds without our consent thereafter.

Feeling that the birds were comparatively safe, yet telling Mabel to look out for them a little, engrossed with other duties I scarcely thought of them again until dusk that evening, when they were brought to my mind by Mabel remarking, "I do not think that mamma bird found her little ones this evening, she was not on them the last time I looked and they were quite cold." "Why, I did not know that she had lost them," I replied. "Oh, I moved them over to the fence this evening, so the bad boys and things couldn't find them, and I s'pose she couldn't either." I hastened out and found that it was too true. The mother bird was fluttering about wholly unable to find her little ones, who were almost perishing with cold. Of course we could not catch her and put her over them, so we brought the little family into the house, wrapped them in flannel and placed them under the kitchen stove; in the morning I found that they had crept out of the nest and were lying on the floor half dead with hunger and cold. I warmed and fed them; then took the nest to its former place, where the mother bird soon discovered it. We did not move them again. One died from the exposure; but the others grew so rapidly that in a few days they had filled the nest to overflowing: how they managed to stay in it as long as they did I cannot imagine. One day Mabel brought one of them to me to show me how large it had grown. I told her to take it back and put it in the nest; she was gone some time when she came running to me with a troubled face, to tell me that she "did not know whatever we were to do with those naughty birdies, every time I put them in the nest they get out again," she said, "and run all over the stubble field." It was then that I breathed a sigh of infinite relief, and felt that my adopted family was safely and happily off my hands at last.

THE AUDUBON NOTE BOOK.

MEMBERSHIP RETURNS.

THE registered membership of the Society on Dec. 31, 1887, was 42,987, showing an increase of 741 during the month, due to the following sources:

New York	705	Missouri	
	195		37
Massachusetts	49	Ohio	37
New Hampshire	39	Michigan	10
New Jersey	13	Indiana	2
Maine	34	California	2
Connecticut	33	Rhode Island	25
Vermont	4	Minnesota	5
Pennsylvania	76	Virginia	1
Florida	21	West Virginia	II
Maryland	6	Nevada	I
Kentucky	25	Tennessee	3
Kansas	8	Dakota	18
Iowa	27	Canada	39
Illinois	19	England	1
		-	_

The registered number of the Society on Dec. 31, 1886, was 17,723, from which it will be seen that the registrations during the year 1887 amount to 25,264. Our register for associate members has not been very extensively availed of, only 37 members having sent in their names for enrollment.

These figures by no means represent the full strength of the AUDUBON SOCIETY. There is an unaffiliated branch society in Philadelphia with quite a respectable membership; there is the Smith College Audubon Society, whose members, although they are entitled to rank as associate members, have not been registered on our books, and some other local societies which seek the same aims by the same methods, without affiliating themselves to the parent Society.

The real strength of the movement, the value of the Society's labors, must be sought in its influence upon the general public, and if this still leaves something to strive for, something wanting to complete success, there is certainly abundant cause for congratulation. The Society has commanded the attention of womankind at large, and compelled them to weigh its arguments in favor of bird protection, and to think about the moral and resthetic aspects of dead-bird millinery, and they have thought to some purpose. Ostrich feathers and cocks' plumes are in vogue, and single quill feathers of eagles, turkeys, or other large birds are worn with effect, but the poor little stuffed bird with his glass eyes and distorted limbs has been pronounced bad taste, and relegated to the limbo to which all dead fashions are consigned before they finally disappear.

Yes, the Society has cause to congratulate itself on

some good work done, but it started out with other aims than the mere overthrow of the prevailing fashion of dead-bird millinery. It aimed to strike at the cause of which this was only a symptom. It aimed at combating the popular assumption that birds were of no consequence to man, and might be exterminated without inconvenience; to awaken a general, intelligent and sympathetic interest in bird protection, by teaching their economic importance to man, and by instructing young and old in their characters and life habits.

To this end the Audubon Magazine was established; it has been received favorably, and its circulation is steadily increasing as it becomes known. No child's education can be considered complete that does not include a liberal course of natural history; and on the special subject of birds the Audubon Magazine is beyond all comparison the best popular reader published.

The Forest and Stream Publishing Company have placed this periodical before the public at their own cost and risk, and we are anxious to secure for it such a circulation that it will in time render the Society self-supporting. This is the one direction in which the friends of bird protection can aid us most effectively. We ask no one to put their hands in their pockets for us, but we do ask all friends of bird protection, all humanitarians, to speak a word in season, in favor of a magazine the proceeds of which are devoted wholly to the costs of spreading the Audubon movement.

C. F. AMERY,

Secretary Audubon Society.

ORNITHOLOGISTS VS. COLLECTORS.

A WRITER in a recent number of the Evening Post is inclined to be severe on ornithologists, because of some communications in a paper known as The Ornithologist and Oologist from a Mr. T. D. Perry of Savannah, in which that gentleman, summing up his oölogic triumphs of the year, claims under the blue grosbeak alone, which he recognizes as a retired, beautiful, and rare species, eleven sets of three eggs, four of four eggs, and several of two eggs, "more (he adds) than I ever took in two seasons combined," and further boasts that he and his friend took eighty eggs of that very rare and beautiful singing bird, the Swainson's warbler, in the same season.

There is ample cause in this wanton destruction, for all the indignation expressed by the writer in the *Evening Post;* but ornithologists must not be held responsible for all that is done in their name by skin

and egg collectors who ignorantly style themselves ornithologists and oölogists. The former may collect both skins and eggs, or cause them to be collected, for purposes of accurate scientific description and comparison, and occasionally, but rarely, a man of science will be reckless of life, and take a specimen for which he has no definite need, but in so far as he does collect, it is always as a means to an end, and that end a worthy one—the advancement of our knowledge of birds; but with the bird or egg collectors, the collection itself is the end; their triumphs are measured by the number and rarity of the species secured.

The collecting of birds and eggs fostered in youth under the mistaken impression that it indicates a taste for natural history, frequently becomes a passion to which the votaries devote all their leisure; and quasi scientific journals are started to keep alive a spirit of emulation among collectors by affording them an opportunity for chronicling their triumphs. The effect of this passion for collecting among boys is perhaps quite as fatal as the fashion of feather millinery among women, and we may expect both to disappear when the natural history and economic importance of birds shall be taught systematically in our schools.

A STORY OF THE IMAGINATION.

Under the above heading, the New York Sun has published an unqualified denial of the Seneca Falls story, in which the prepossessing little widow, Mrs. Ruth Armstrong, was said to have netted about fifteen hundred dollars, by inducing a number of local residents to subscribe to Audubon pledges, which she subsequently converted into promissory notes, and negotiated with Albert Hall, the banker of Sheldrake, who of course demanded his pound of flesh as uncompromisingly as old Shylock.

The story had a very realistic air about it, and was well calculated to impose upon the credulous; but an investigation only served to show that in every detail it was a concoction of the same malicious type, as the less definite ones in which "a farmer in the southern portion of the State," or "a farmer a few miles from here," was said to have had his signed pledge converted into a promissory note.

It was very difficult to trace the authors of indefinite stories such as have been flying about in country papers during the past two years, but the Seneca Falls story, published as it was in a respectable New York journal, furnished a clew to the writer, and admitted of complete refutation. The first step in the investigation was to write to the several parties named in the story, and in addition to this we communicated with a respectable firm of resident lawyers, Messrs. Hammond, McDonald & McDonald, at Seneca Falls, asking them to investigate the stories; and these gentlemen, after careful inquiry, report "that none of the six persons mentioned in the story is a resident of the county, and that there is no truth whatever in the story, nor any foundation for it." Our letters to the victims came back unclaimed.

With these evidences in our possession we communicated with the editor of the New York Sun, who was of course anxious to make all necessary reparation. The writer is too insignificant for the Society to proceed against legally, and moreover, we assume that he has been a mere tool in the hands of a party of skin collectors, who, if they are wise, will be careful to give us no further provocation to proceed against them criminally. Men who employ disreputable tools for criminal purposes, may be sure their tools will "squeal" to save their own skins. After this exposure, too, we trust the press everywhere will be on its guard against the admission of any such ridiculous stories into their columns. The conversion of an Audubon pledge into a promissory note is simply an impossibility.

A YOUNG ORNITHOLOGIST.

SOUTH HINGHAM, Mass., Jan. 10, 1888. Dear Mr. Editor:

I am 12 years old, and a subscriber to the AUDU-BON MAGAZINE. I like it very much, as I am interested in the study of birds. Most every day after school, my dog Joe and I stroll into the woods to see them. I have three or four books relating to birds, and every night I read about some bird in them, and then write about it. I have also a block of paper, on which I am writing now about the chickadee. I have a natural history room up-stairs, in which I keep my papers on birds, and a case of curiosities, butterflies, etc. I am trapping with two boys this year, Warren and Frank Cushing, friends of mine; we call ourselves by the Indian names, Jim, Jack and Joe Anver. We caught eight woodchucks, four muskrats, and one rabbit last year, and hope to meet with as good success this year. In the woods we have a camp, near which we have a camp-fire, and pop corn, and have a fine time. We take up my spaniel Joe, and their Gordon setter Dan, and the dogs seem to take as much interest as we boys in the H. W. Young. hunt. Your friend,

BOUND VOLUME.—We are now able to supply the first volume of the AUDUBON MAGAZINE, bound in cloth, price \$1.00. Covers may be had for 25 cents, and loose numbers sent to us will be bound for 50 cents.

EMINENT PEOPLE ON BIRD PROTECTION.

OAK KNOLL, Danvers, Mass., and mo., 20, 1886.

Editor Forest and Stream:

I heartily approve of the proposed AUDUBON SOCIETY. We are in a way to destroy both our forests and our birds. A society for the preservation of the latter has long been needed, and I hope it is not too late for the accomplishment of its objects.

I could almost wish that the shooters of the birds, the taxidermists who prepare their skins, and the fashionable wearers of their feathers might share the penalty which was visited upon the Ancient Mariner who shot the Albatross. Thy friend,

JOHN G. WHITTIER.

Brooklyn, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I am heartily in sympathy with your purposes for the protection of birds, and should be glad to contribute any influence that I can to that end.

If there were no purchasers there would be no demand, and no reason for slaughtering these winged gems. But as only women create a demand, it rests upon them to stay this wanton destruction. I am sure that it is only necessary to bring before American women the cruelty of this "slaughter of the innocents" that fashion is carrying on, to secure a renunciation of this ornament and the salvation of birds.

On this subject the kind feelings, the taste, and æsthetic sympathy of the whole community are on your side, and if you persevere you will surely win.

HENRY WARD BEECHER.

CORNWALL-ON-HUDSON, N. Y., Feb. 22, 1886.

Editor Forest and Stream:

You have indeed my hearty sympathy in every effort to prevent the slaughter of my innocent little neighbors and friends, the birds. In the destruction of forests and birds, the people of this land are inviting very great evils and inflicting wrongs on posterity which scarcely can be measured. The press should render it impossibe for women to sin thoughtlessly and ignorantly in demanding little birds for their adornment. The evil should be brought home so fully to the knowledge of all, that the continued wearing of our useful little birds should become the badge and indication of a callous, vulgar nature. You are doing a humane and patriotic work in exciting public aversion to one of the most cruel and stupid wrongs of the age.

Respectfully yours,
EDWARD P. ROE.

West Park, N. Y., Feb. 20, 1886. Editor Forest and Stream:

I scarcely need assure you that your undertaking to form a society for the protection of our wild birds against the ravages of the milliners and the sham scientific collectors has my warmest sympathy and approval. It is a barbarous taste which prompts our women and girls to appear upon the street with their head gear adorned with the scalps of our songsters; and it is mere vanity and affectation which prompts so many persons to make up cabinets of the nests and eggs of the same. The destruction of our birds from their natural enemies is immense, and this craze of the collectors, and folly of the milliners and their customers in addition, threatens their serious diminution.

I hope you may succeed in creating so strong a public sentiment upon the subject that the collectors of skins and eggs for the unworthy purposes of fashion or to indulge the vanity of pseudo-naturalists may suddenly find their occupation gone.

Please add my name to the list of the members of the Audubon Society. Very sincerely,

John Burroughs.

160 W. 59TH STREET,) NEW YORK, Feb. 20, 1886. \(\)

Editor Forest and Stream:

No one who will take the trouble to give the matter a few moments' serious consideration can be in doubt, I think, as to the wisdom of organizing the AUDUBON SOCIETY, and I am thankful that such a step is contemplated. There is an element of savagery in the use of birds for personal decoration, which is in grotesque contrast with our boasts of civilization. But even the savage stops short, as a rule, with the feathers. It is only Christian people who think it worth while to butcher a whole bird to adorn their head gear. I am sure, however, that this is largely from that unreflecting habit which is a leading vice in people who follow the fashions. But it is a vice; as Hood sang, when he wrote—

For evil is wrought By want of thought As well as by want of heart.

If the Audubon Society can teach men, and especially women, to think on this subject, half of the battle will have been won. Henry C. Potter.

ANDOVER, Mass., Feb. 21, 1886.

Editor Forest and Stream:

I am in earnest and indignant sympathy with the motive of any society organized to prevent the murder of birds for decorative purposes.

E. S. PHELPS.





THE RUSTY GRACKLE.
(Scolecophagus carolinus (Müll.))

THE AUDUBON MAGAZINE.

VOL. II.

MARCH, 1888.

No. 2.

THE RUSTY GRACKLE.

THE birds with which we are most familiar are those which come to us in spring and spend the summer with us, mating, building their nests and rearing their broods under our very eyes. They are our old acquaintances, and we come to look upon them as friends, whose return we may expect at a certain time each spring, and if their arrival is for any cause delayed, we experience a feeling of real disappointment. The familiar robin, the sweet-voiced bluebird, the active, energetic and scolding wren and the gorgeously habited oriole, belong to this class, and the dweller in the country, if he does not know each one of these and hail his arrival in spring with feelings of delight, must indeed be very heedless. When they have come, their every movement is watched, and the children are all anxious to know when and where the birds are going to build their nests. If a site is chosen near the house what delight is expressed, and how eagerly each operation is watched! What exclamations over the first egg that makes its appearance in the neat structure, and what agonies of anxiety lest some accident should destroy it. Yes, the birds are certainly the children's friends, and the little ones could not have better ones, for association with them can not fail to teach important lessons.

Of those birds which come to us in autumn and spend the winter here, most of us know but little. Many of them do not

reach their winter haunts until the weather has become so inclement that few people care to venture into such places as the winter birds choose for their homes. And yet, even at the bitterest season of the year, the woods and thickets are populous with a life that is all their own, and a multitude of busy, blithe, cheery, winged creatures are hard at work earning an honest living, and seeming to take great pleasure in their ceaseless work.

Besides these two great classes, the summer and the winter residents, there is another large class of birds which are with us for a short time only during spring and fall. To this class belongs the Rusty Grackle.

Although abundant birds at certain seasons of the year, they are never residents with us of the Middle States. The Rusty Grackle comes to us from the north in the early autumn and remains until winter sets in, when the greater number of his kind take their departure for more genial climes. Sometimes a few, perhaps more hardy than their fellows, or, it may be, induced to loiter by some unusually favorable feeding ground, remain with us all the winter, one observer having recorded the capture of several individuals of this species in Connecticut during the months of January and February, but generally the Rusties have all gone by the end of November. While they are with us in the autumn, they are often seen

about the barnyard, standing on the fence, or even walking sedately about among the cattle, looking for insects or picking in the straw in search of scattered grain. Sometimes they may be seen walking over the plowed fields in search of insects in the upturned earth. They are fond of berries, too, and look along the borders of pools and brooks for the water insects and crustaceans, which constitute a considerable portion of their food.

The Rusty Grackles spend the winter in the Southern States, and by the time the winter is half over begin their slow journey northward. We have seen them in New York and Connecticut from the middle of February until well into April, when they disappear and do not return again until September. During their stay with us in spring, the males have assumed their handsome breeding plumage of rich glossy black, and are thus much more beautiful than when in their rusty autumnal dress. At this season, they are much more noisy than in autumn, and often give voice to a simple but pleasant song. Now, too, they seem to prefer swamps and wet places generally, and are sometimes found associated with the red-winged blackbird.

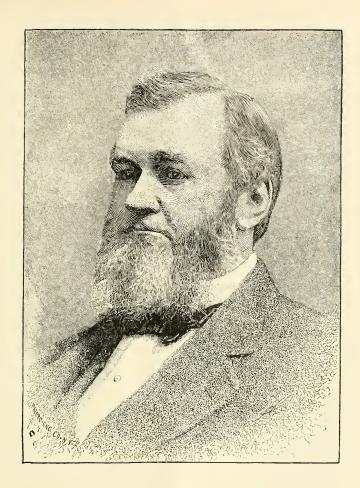
After it leaves us, the Rusty Grackle continues its journey northward, reaching northern Maine about the middle of May. Here some of them remain to breed, while others pass northward to Labrador and to the fur countries, extending their migrations as far north as timber grows. Richardson gives its summer range as extending as far north as the 68th parallel of latitude, and no doubt it breeds almost everywhere throughout the Dominion of Canada east of the Great Plains, where its place is taken by a nearly allied species, the blue-headed Grackle. Audubon tells us that this bird begins to lay about the first of June in Maine and fully a fortnight later in Labrador. The nest is a rough affair on the outside. formed of small weed stems and coarse grasses, but is neatly lined with finer grass, or, in Labrador, with moss. It is usually placed in a low bush or sometimes on the lower branch of a tree, and contains four or five eggs, greenish in color, mottled and clouded with brownish markings.

The Rusty Grackle does not hop when on the ground like the robin and its near allies, the finches, but walks after the manner of most of our blackbirds and the crows and rayens.

Audubon gives us an interesting account of one of these birds in captivity. He says, "An acquaintance of mine, residing in New Orleans, found one of these birds, a beautiful male in full plumage, not far from that city, while on one of his accustomed walks. It had been shot, but was only slightly injured on one of its wings, and as it was full of vivacity and had a clear brilliant eye, indicating that its health had not suffered, he took it home and put it in a cage with several painted buntings. They soon became accustomed to each other, the Grackle evincing no desire to molest its smaller companions. I saw it when it had already been caged upward of four months, and had the satisfaction to hear it sing repeatedly. It frequently uttered its traveling chuck-note. It was fed entirely on rice. This was the only specimen I ever saw in captivity, and it proved a very amiable companion." Wilson also speaks of these birds in captivity, and says that they are readily tamed.

The plate of the Rusty Grackle, which accompanies this account of the bird, is a reproduction of Audubon's illustration of the species.

The Rusty Grackle is 9 1/4 inches in length and is 14 inches in alar extent. The full plumaged male is everywhere deep glossy black, with some greenish and bluish reflections. The female is brownish black; the sides of the head above and below the eyes are light yellowish brown, and all the feathers are edged with brownish. The eye is pale yellow, bill and feet black.



SPENCER F. BAIRD.

BY the death of Professor Spencer Fullerton Baird, which occurred at Wood's Holl, Mass., on the 19th August last, America has lost one of the greatest men and most efficient scientific workers this continent has given birth to

Professor Baird was for many of the later years of his life the Secretary of the Smithsonian Institution, and United States Commissioner of Fish and Fisheries, and in each of these offices he perfected so excellent an organization of men and means, and achieved such important results, that his claim to name and fame might very well have rested on his achievements in either department. But when we consider that, valuable as were his labors in these im-

portant offices, they were but a small fraction of his life's work, that as a scientific man his writings had brought him worldwide fame, that the catalogue of his published contributions to science embraced over a thousand titles, and that of every subject of which he wrote he displayed such a knowledge as to render him a final authority, we begin to have some conception of the greatness of the man and to realize how largely he contributed to the maintenance of his country in the race of intellectual progress.

Spencer Fullerton Baird was born at Reading, Pa., Feb. 23, 1823, and at an early age displayed that taste for natural history, which united with his definiteness

of purpose, led him to distinction in his chosen field of research. When fourteen years old, he began, with his brother William, a collection of the birds of Cumberland county, Pa., and the materials then brought together formed the nucleus of the Smithsonian collection of birds. It was at this period of his life that Baird formed the acquaintance of Audubon, who became his warm friend, and whom he materially aided in the labors to which in later years he gave an added value by systematizing their results.

At the age of seventeen he graduated from Dickinson College and entered upon the study of medicine, but he appears to have longed for a broader field of research, and five years later accepted the chair of Natural History, and later that of Chemistry, in Dickinson College. While thus engaged he became associated with Agassiz, with whom he planned a joint work on the freshwater fishes of the United States, an undertaking which from some cause fell through, but the mere fact that Agassiz entered into the arrangement, is evidence of the ripeness of intellect displayed by his young colleague. The five years spent by Baird as professor in this institution constituted a definite epoch of his life; they were years devoted to the acquisition and consideration of facts brought to light by his own labors and those of others, and these facts were classified and arranged with some efforts at system in the process of collections; but it was not until the close of this period that Baird developed those great capacities for generalization and systemization, which later enabled him, as it were, to build together the achievements of past and contemporary workers into a monument in which all the valuable results of their life labors were so arranged that they were seen to constitute severally important parts in a great whole of truth, order, and beauty.

In every department of natural history

Baird may be said to have stood to his fellow workers in the relation of the architect to the quarryman. No matter how perfect their knowledge of their several specialties, Baird mastered all that they knew, and with rare insight, saw at a glance the relations of truths in one branch of science, to truths in all others, and the general order which rendered it possible to bind all together in one harmonious whole.

In 1850 Baird was elected Assistant Secretary of the Smithsonian Institution, and naturally succeeded to the Secretaryship on the death of Professor Henry, and it was in his conduct of the duties of this office that he found opportunity for the display of that rare administrative ability and capacity for organization, which led to his selection for the post of Commissioner of Fish and Fisheries.

His labors in this department, his success in restocking depleted waters with choice fish, and the enormous economic importance of the results achieved, are topics of the day, and familiar to every one interested in the subject. Having seen what was wanted, designed the necessary measures, and organized a staff to give effect to them, the work really seemed to call for little further attention from him. An hour or two a day was as much as he was in the habit of devoting to this important department, but he was familiar with every detail of the operations.

Professor Baird's contributions to scientific literature were, as already said, very numerous. Between 1850 and 1874 he published several works upon North American natural history, the most important of which, perhaps, was his "North American Birds," published in 1858, a work which Coues characterizes as the most important and decided single step ever taken in North American ornithology, in all that relates to the technicalities of the science, effecting a complete revolution in classification and nomenclature.

As a scientific man Professor Baird enjoyed world-wide fame. Dickinson College awarded him the degree of Doctor of Physical Science, Columbia conferred on him the degree of Doctor of Laws, Melbourne awarded him the silver medal of the Acclimatization Society, France the gold medal of the Société d'Acclimation, the Emperor of Germany the first prize of honor (Erster Ehrenpreis) of the International Fisheries Exhibition at Berlin, and the King of Norway and Sweden decorated him Knight of the Royal Norwegian Order of Olaf. He was a member of nearly all the leading scientific associations of the world, and genera and species innumerable have been named after him. Honors and distinctions which other men spent laborious days and sleepless nights in striving for, came to him unasked, unsought; he allowed himself to be associated with many societies and institutions, simply because he was too kind to reject a courtesy.

If his genius did not mark him out as a man possessed of powers superior to those of most other contemporary great men, we might be tempted to say that his kindliness of disposition, his gentle consideration for the feelings of others, and his extreme simplicity were his leading characteristics, for these traits could not fail to impress themselves on every one with whom he came in contact. On this subject we cannot do better than quote from the personal reminiscences of Chas. W. Smiley in the *Microscopical Journal:*

"If one quality was more prominent in his life than others it was his kindness. He had as kind words for messenger boys as for Senators. He never showed that he felt superior to anybody, and he always appeared to prize the friendship and cordiality of those whom everybody knew to be his inferiors. What often surprised me was that he would spend valuable time in entertaining those who had no such claims upon him. Some book, picture, specimen, letter,

or incident was generally handy to furnish him a text for charming conversation. Some came at length to feel, after his health began to fail, that they ought not to let him use his time thus, for he surely would atone for it in over-work; and so, not compelled by business to confer with him for several days, when one endeavored to lessen the multitude of interviews he was holding, the Professor noticed the absences, and playfully rallied the absentee upon his omissions, as if the former, and not the latter, had been the loser thereby. Whoever came into his friendship came to stay, and he never deserted any in adversity, even when they became troublesome to him.

"I never saw him at all angry, and upon catechising one of his most constant attendants upon this point, the most I could learn was that on one occasion, when a beautifully bound book dropped into the mud, virtually ruining it, the Professor uttered some mild by-word. When a man came at him with a storm of abuse or of misapprehensions, he would sit perfectly quiet until the storm had spent itself and the bearer had said all he could think of, then in the calmest manner he replied so kindly as always to send his antagonist away happy. His kindness extended to wrongdoers and unfaithful employees. He was never known to discharge from the service for incompetency or neglect any person whom he had know personally. When it became evident that one was not doing well, the Professor would try the person in some other capacity. There are those who have thus made very extended rounds in search for their proper spheres.

"Next to kindness may be placed modesty. As it permeated everything, there could be no suspicion of affectation. Even his dress, always neat, was so unostentatious that he was often likened in appearance to a well-to-do farmer. His horse and carriage were the plainest that could be seen at the Smithsonian or the White House.

He was granted the privileges of the floor in the Senate and the House, but he never exercised them. He did not like to dine out with foreign ministers and Government officials, though his rare powers of conversation and his official position would have made him doubly welcome there. He was exceedingly averse to appearing in public meetings. I never saw him on a public platform but once, and he stipulated then that he must not be called upon nor mentioned. When he attended the National Academy or the American Association he would usually be seen in the lobby rather than in the sessions. He refused the presidency of the latter society at the Portland meeting from his aversion to standing before assemblies. When asked if he would attend various celebrations to which he was invited, he generally replied: 'What do you suppose they would care for my presence?' Of all the tickets which he received to stage seats on great occasions, and free seats for great events, he used scarcely one per cent. He attended neither church nor theatre for a dozen years. Barnum's circus was the one only large gathering which he loved to frequent. 'I don't care what the rest of you do; I am going to the circus this afternoon,' he exultingly exclaimed one day a few summers ago. The way he threw off care that day was grand. He never courted the favor of the President, Senators, or Congressmen. and he felt so unequal to paying them the attention he considered them to deserve that he sometimes tried to delegate the task. And yet the intermediaries, whom the Professor evidently considered very important, as I have been told, were regarded by the legislators only as so many errand boys.

"To me the calmness with which he at last faced the inevitable was amazing. For months he knew his condition and the progress of his disease even better than his physicians. Quietly he arranged his estate, selected his successors in all three institutions, gave certain confidential directions in the interest of his family, but he tried to conceal from them his expected departure. There was no crucifix, no priest, no religious ceremony, no tears, no murmur, no farewell. Only when he had gone was it discovered to what marvellous perfection he had brought his business arrangements. Only then did we learn many things that had been his secrets for months. To my mind even death quailed before him, and, as had occurred so often in his life, so this last visitor, which came as an enemy, melted into a friend. All was calm, peaceful and sublime."

And now what shall be said of the genius of the man? for he had undoubted genius. In his case genius can hardly be defined as the capacity for hard work. It would perhaps be hard to find a brain worker whose results great or small were achieved with less conscious effort.

Baird's genius was akin to Shakespeare's, although displaying itself in another field. It was due to his clear insight into his subject, his ready apprehension of the harmony that pervades all nature, of the measure of relationship and divergence that assigns the proper place to each group of plants or animals and to each member within a group; in fact to his clear broad grasp of the subject in all its relations.

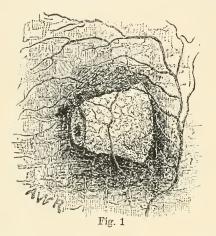
Baird's clear insight in this field can no more be attributed to hard work than Shakespeare's marvellous insight into man's character, and the mainsprings and motives of conduct. The one or the other may have overworked himself by too long a strain upon his physical powers, but the quality of the work done was in both cases the result of clear instinctive insight exerted without conscious effort, but necessarily not without a certain measure of laborious preparation. What the specialist in any department of research might have acquired by the labors of a lifetime, could be summed up and valued by Baird almost at a glance, and its proper place assigned to it in the systemized knowledge of the age.

THE spring time is coming once more; snow and ice will soon disappear, and Nature burst the fetters which so long have held her spell-bound; the waters in the ice-bound streamlet will soon be bubbling, bounding or gliding along; winged insects will once more flit over its surface, and tiny fish disport themselves in its depths; the trees will be bursting into bud and blossom, the eye be refreshed by the soft green tints that meet it everywhere in forest or on prairie, the heart gladdened by the evidences that the earth is renewing its youth, with unfailing promise of fruitfulness; and to crown all, the wild melody of the birds bursting forth in field and orchard, will compel us mechanically to lift up our eyes, and stir the heart to sympathy and longing, and to a desire to be up and doing, with hope and confidence that summer will soon be here, that the earth will renew her increase, and the seed time be succeeded by harvest.

But the birds! how do they know it? So many of them were born only last summer. They lingered on in the only land they knew until food was scarce, until to have lingered longer were death. With what misgivings perhaps did they wing their flight to unknown regions. But they found the sunshine, and seed, and insects, and reveled in plenty, while the Northern States were held in winter's icy grasp. What can prompt them to return to the birth-place from which stern necessity drove them out? Some of them are arriving even before winter has relaxed his icy grasp; they come in hope, they stay in confidence, they know that spring time will follow winter, they hold the promise sure.

And how glad the children are to welcome them back! How their eyes brighten as they see the birds flitting from tree to tree, and recognize once more their half-forgotten minstrelsy. Between the children and the birds what untold sympathies! There was a prime val past in which there were no birds, and who can imagine what a dreary life man would have lived on earth if the song birds had not heralded his advent with their glad warblings, taught the race to look up, filled their souls with melody, and roused them to emulate the gay carolings of the birds with their own vocal organs?

And the return of birds brings gladness to grown-up children also, reminding them of the time when they too shared the wild birds' careless freedom, and thus bringing them into closer sympathy with the chil-Many a toil-worn, and more or less care-worn farmer is ready to lend a hand to build a bird's house—to please the children, of course-who yet smiles to find what pleasure he himself finds in the task. And what inventive genius in the matter of birds' houses is displayed by the mother who rarely has a moment to spare from the daily round of duties. What treasures in the way of tomato cans she produces from almost inaccessible shelves in old closets! What forgotten boxes she brings to light! What happy suggestions she makes of ways and means to adapt them to the desired ends! And how father's brow wrinkles as he mentally strains to work out the problems suggested before he takes the task in hand! The work gets itself done somehow, although all too slowly for the impatient young ones; but one after another boxes and tomato cans and flower pots are secured to the walls of the house, or suspended from trees, or elevated on poles, and advertise themselves as houses to let; real birds' houses, if the birds would only recognize them as such, and take possession. But that if! How the children are balanced between hope and fear pending its solutions! How they watch the advent of every bird within the charmed circle! How they strive to attract them with crumbs! How their eyes wander to the "houses to let." What trepidation if a bird alights near one! What crowning joy when at last a pair of bluebirds, or mar-



tins, or wrens, take possession and begin building! What a delightful calm follows excitement, as hope resolves itself into fruition, suspense into realization!

For years past these little birds' houses have been a feature of country and suburban life "o'er all the pleasant land," and now that Audubon Societies have sprung up and are spreading in every village and hamlet, and developing a healthier sentiment among those who erstwhile cared not for these things, we may confidently look for a considerable extension of the custom. We want to guide the way, too, to a more tasteful style of architecture in birds' houses. Those in general use are well enough as means to a desired end, but oftener than not they are unsightly. There is no need for this; tasteful birds' houses may be designed of very simple material. Here is one constructed of a flower-pot, secured to the wall, which without further adornment does admirably for a wall covered with creepers. The simplest method of making them, says our artist, is to fasten a 5-in. pot against a stone or brick wall. The drain hole of the pot is enlarged by chipping off a small piece

at a time with the sharp ferrule end of a file, but to do this successfully the pot must be soaked in water for three hours to soften the ware. Do not try to make the hole exactly symmetrical, but have its outline irregular. Two small holes are also chipped in the sides of the pot, one of the diameter of one-half inch; this hole when the pot is in position is to answer as a window to admit a small quantity of light into the interior of the pot; the other hole, on the under side of the pot, is to be but one-quarter of an inch in diameter, and is for the purpose of admitting a current of fresh air. When it is placed in position the pot is held against the wall to which it is to be fastened by leaning a post or board against it. For a cement for fastening and ornamenting the pot, plaster of Paris is to be preferred to Portland or other cements, the plaster being light and quick setting, which is hastened by adding a small quantity of salt when mixing it. Another advantage the plaster



possesses is that it is a non-conductor of heat, so that all danger of the interior of the bird house becoming over-heated is removed. Before applying the plaster to the pot the latter must be soaked in water for one hour, or the plaster will not adhere. If the pot is an old one it must be thoroughly scrubbed with a stiff brush in warm water to remove all minute vegetable growths. Before applying the plaster to the rim of the pot and against the wall, the wall must be thoroughly moistened or the plaster will not adhere. When applying the plaster about the rim of the pot, and against the wall, use it thick and pasty and apply rapidly. After the plaster has set, the board prop is removed and work on another pot begun. When all are in position the plaster is given

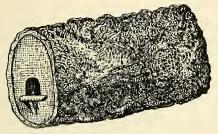


Fig. 3.

six hours to harden and dry before putting on the rough ornamental coating, as the weight of this might break away the pots from the wall. This rough coating is applied with an old tea or table spoon well greased with lard or suet fat, to prevent the plaster from adhering to the spoon and forming into an unmanageable mass. When applying the plaster, small living branches of vines can be imbedded in the plaster, and before the entrance a small twig or rustic branch is fastened for a perch.

After the plaster is thoroughly dry two heavy coats of boiled linseed oil mixed with a "dryer" are applied. The oil protects the plaster from the actions of rains and the atmosphere. The pots can be painted with a dull green or any of the grays or browns that match the colors of the barks of our native trees, or that correspond with the grays or dull browns of our various earths.

Lichens and mosses can be fastened to the houses by imbedding them in the plaster when it is soft.

A hanging bird house can be constructed of a nine-inch flower-pot and an old milk pan, as shown in Fig. 2. A hole is made in the bottom of the pot and pan large enough for a turned picket or round stick to pass through, so as to allow for the fastening of the straw which is to form the thatched roof. A small hole is bored through the

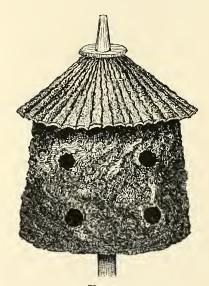


FIG. 4.

picket into which a cross pin of either iron or wood is inserted. On this pin the bottom of the pan rests, otherwise it would slide down the picket. The sides of the milk pan are punched full of holes to allow the plaster to pass through and clinch, as it will not adhere to the smooth surface of the tin.

The pan is to be filled with earth, in which may be planted *Tradescantia*, German ivy, or moneywort, which will droop over and twine in the branches of the "cat screen." Some of the more hardy succulent plants, such as house leeks, creeping Charley, *Sempervivum*, etc., do well in dry locations.

This bird house can also be fastened to

a standard pole, as indicated by the dotted lines in Fig. 2, when it is not desired to suspend it. The cat screen is intended to prevent cats from passing up the pole and also to break the otherwise stiff and ungraceful lines, and as a trellis for vines to entwine on after having climbed or been trained up the standard pole. The cat screen is made of the branches of the black alder, or birch, which are firmly bound to the picket or standard pole, some two feet below the bottom of the pan, against which they press and radiate out as shown. The best and most ornamental branches for making the screens are red birch with the

cones on, spruce with its rich buds, and sweet gum with its curious corky bark.

Other tasteful houses may be made by covering ordinary wooden boxes with the rough bark taken from old oak or chestnut logs. This can be neatly tacked to a frame about the boxes, so as to look like a section of a log as in Figures 3 and 4.

The trouble expended in making homes for our summer visitors will not be wasted. They will amply repay by their sweet songs, their bright ways, and their more important services as insect destroyers, any effort which we may put forth to show them that we are their friends and to bring them close to us.

HINTS TO AUDUBON WORKERS.*

FIFTY COMMON BIRDS AND HOW TO KNOW THEM.

х.

SNOW BUNTING; SNOWFLAKE.

THIS is the true snowbird, and can never be confounded with the junco. The monastic juncos are closely shrouded in slate-gray robes and cowls, only a short under robe of white being marked off below their breasts. The snowflakes, on the other hand, as their name suggests, are mostly white, although their backs are streaked with dusky and black.

The juncos come about the house in spring and fall, and during the early snows, but the snowbirds, timid and strange, fly over the fields and are associated with the wonderful white days of a country winter, when the sky is white, the earth is white, and the white trees bow silently under the wand of winter till they stand an enchanted snow forest. For, as the flakes drift through the air, the snowbirds, undulating between the white earth and sky, seem like wandering spirits that are a part of the all-pervading whiteness. Thoreau says, "The snow buntings and the tree sparrows are the true spirits of the snow-

storm. They are the animated beings that ride upon it and have their life in it."*

Mr. Allen, in speaking of our winter birds, says: "The beautiful snow bunting (Plectrophenax nivalis, Meyer) is one of the largest, and when whirling from field to field in compact flocks, their white wings glistening in the sunlight, form one of the most attractive sights of winter; and most commonly appearing about the time of heavy falls of snow, and disappearing during continued fine weather, there is in the popular mind a degree of mystery attached to their history, being the 'bad weather birds' of the superstitious. Cold half-arctic countries being their chosen home, they only favor us with their presence during those short intervals when their food in the northern fields is too deeply buried; and being strong of wing and exceedingly rapid in flight, they can in a few hours leave the plain for the mountain, or migrate hundreds of miles to the northward."+

^{*} Thoreau's "Winter," p. 89.

[†] American Naturalist, Vol. I., No. 1, p. 43, March, 1867.

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Late in December I have seen a flock of them flying over the meadows with the rhythmical undulating motion of the gold-finches, twittering ter-ra-lee, ter-ra-lee, ter-ra-lee as they went. Now and then they would light for a moment to pick at the seeds appearing above the snow, but soon they would fly on toward the north.

HAIRY WOODPECKER.

The habits of the woodpecker family are more distinctive than those of almost any group of the birds we have been considering. Of course the finches suggest a seedcracking bill, thickset bodies, and comparatively phlegmatic temperaments, that contrast strangely with the delicate bill, the slender frame and nervous temper of the warblers; and the sparrows coming under the finch group, emphasize the difference by their dull colors and heavy flight. the families of thrushes, blackbirds, swallows, and wrens stand apart: but many of their distinguishing features are found only by careful study, while the most superficial observer cannot fail to recognize the family traits of the woodpeckers.

Woodpeckers—the very name proclaims them unique. The vireo daintily picks his measure-worm from the green leaves, and steals birch bark for his hammock; the robin drags his fish-worm from its hiding place in the sod, and carols his happiness to every sunrise and sunset; the sparrow eats crumbs in the dooryard and builds his nest in a sweet briar; the thrushes chant their matins among the moss and ferns of the shadowy forest; the ovenbirds and chewinks "rustle" among the rich brown leaves of the woods; the goldfinch balances himself on the pink thistle or yellow mullein top, while he makes them "pay toll" for his visit, and then saunters through the air in the abandonment of blue skies and sunshine. The meadowlark, looking for breakfast, sends up his song from among the cowslips; the redwing "flutes his o-kalee" over alders and cat-tails; 'the bobolink, forgetting everything else, rollicks among the buttercups and daisies; but the woodpecker finds his larder under the hard bark of the trees, and, oblivious to sunrise and sunset, flowering marsh and laughing meadow, clings close to the side of a tree, as if the very sun himself moved round a dead stub!

But who knows how much these grave monomaniacs have discovered that is a sealed book to all the world besides? Why should we call them names? They are philosophers! They have the secret of happiness. Any bird could be joyous with plenty of blue sky and sunshine, and the poets from Chaucer to Wordsworth have relaxed their brows at the sight of a daisy; but what does the happy goldfinch know of the wonders of tree trunks, and what poet could find inspiration in a dead stub on a bleak November day? Jack Frost sends both thrush and goldfinch flying south, and the poets shut their study doors in his face, drawing their armchairs up to the hearth while they rail at November. But the wise hairy woodpecker clings to the side of a tree and fluffing his feathers about his toes makes the woods reverberate with his cheery song—for it is a song, and bears an important part in nature's orchestra. Its rhythmical rat tap, tap, tap, tap, not only beats time for the chickadees and nuthatches, but is a reveille that sets all the winter blood tingling in our veins. There the hardy drummer stands, beating away on the wood with all the enjoyment of a drum major! How handsome he looks with the scarlet cap on the back of his head, and what a fine show the white central stripe makes against the glossy black of his back!

Who can say how much this brave fellow has learned from the wood spirits? What does he care for rain or blinding storm? He can never lose his way. No woodsman need tell him how the hemlock branches tip, or how to use a lichen compass.

Do you say the birds are gone, the leaves have fallen, the bare branches rattle and the fall rains have blackened the trees? What does he care? All this makes him rejoice! The merry chickadee hears his shrill call above the moaning of the wind and the rattling of the branches, for our alchemist is turning to his lichen workshop. The sealed book whose pictures are seen only by children and wood fairies opens at his The black unshaded tree trunks turn into enchanted lichen palaces, rich with green and gold of every varying tint. The "pert fairies and the dapper elves" have left their magic circles in the grass, and trip lightly around the green, velvety moss mounds so well suited for the throne of their queen. Here they find the tiny moss spears Lowell christened, "Arthurian lances," and quickly arm themselves for deeds of fairy valor. Here, too, are dainty silver goblets from which they can quaff the crystal globes that drop one by one from the dark moss high on the trees after rain. And there—what wonders in fern tracery, silver filigree and coral, for the fairy Guinevere!

But hark! the children are coming-and off the grave magician flies to watch their play from behind a neighboring tree trunk. There they come, straight to his workshop, and laugh in glee at the white chips he has scattered on the ground. They are in league with the fairies, too, and cast magic spells over all they see. They spy the upturned roots of a fallen tree. It is a mountain! And up they clamber, to overlook their little world. And that pool left by the fall rains. Ha! It is a lake! And away they go, to cross it bravely on a bridge of quaking moss. As they pass under the shadow of a giant hemlock, and pick up cones for playthings, the pile of dark red sawdust at the foot of the tree catches their eye, and they stand open-mouthed as the oldest child tells of a long ant procession she saw there one day, and how each tiny

worker came to the door to drop its borings from its jaws. How big their eyes get at the story! If the woodpecker could only give the yellow hammer's sequel to it! But soon they have found a new delight. A stem of basswood seeds whirls through the air to their feet. They all scramble for it. What a pity they have no string! The last one they found was a kite and a spinning airtop for a day's play. But this-never mind -there it goes up in the air dancing and whirling like a gay young fairy treading the mazes with the wind. "How pretty! Just see this piece of moss!" And so they go through the woods, till the brown beech leaves shake with their laughter, and the gray squirrels look out of their round windows in the tree trunks to see who goes by, and the absorbed magician—who can tell how much fun he steals from his lofty post of observation, to make him content with his stub!

Why should he fly south when every day brings him some secret of the woods, or some scene like this that his philosopher's stone can turn to happiness? Let us proclaim him the sage of the birds! If he could only talk! The children would gather about him for tales of the wood sprites; the student of trees would learn facts and figures enough to store a book; and the mechanic! Just watch him once as he works!

A master of his trade, he has various methods. One day in September he flew past me with a loud scream, and when I came up to him was hard at work excavating. His claws were fast in the bark on the edge of the hole, and he seemed to be half clinging to it, half lying against it. His stiff tail quills helped to brace him against the tree, and he drilled straight down, making the bark fly with his rapid strokes. When the hole did not clear itself with his blows he would give a quick scrape with his bill and drill away again. Suddenly he stopped, picked up something, and flew up on a

branch with it. He had found what he was after. And what a relish it was! I could almost see him holding it on his tongue.

Another day in November he had to work harder for his breakfast, and perhaps it was fortunate. The night before there had been a sharp snowstorm from the north, so that in passing through the woods all the trees and undergrowth on the south of me were pure white, while on the other side the gray trees with all their confusion of branches, twigs and noble trunks stood out in bold relief. The snow that had fallen made it rather cold standing still, and I would have been glad to do part of Mr. Hairy's work myself. But he needed no help. He marched up the side of the stub, tapping as he went, and when his bill gave back the sound for which he had been listening, he began work without ado. The bark must have been harder or thicker than the other, for instead of boring straight through, he loosened it by drilling first from one side and then the other. When he could not get it off in this way, he went above, and then below, to try to start it, so that, before he got what he wanted, he had stripped off pieces several inches long and fully two across. He was so much engrossed that I came to the very foot of the stub without disturbing him.

Last summer, in going through the edge of the woods, I was attracted by the cries of a woodpecker, and creeping up discovered a mother feeding her half grown baby. She flew off when she saw me, probably warning the little fellow to keep still, for he stayed where she left him for five or ten minutes as if glued to the branch, crouching close, and hardly daring to stir even his head. Then, as she did not come back, and he saw no reason to be afraid of me, he flew off independently to another limb, and marched up the side arching his neck and bowing his head as much as to say, "Just look at me now!"

DOWNY WOODPECKER.

The downy looks so much like the hairy that it would be easy to confound them if it were not for the difference in size. The downy is fully two inches shorter than the hairy. As you see him on a tree at a distance, the white stripe of his back is bounded by black, or as Thoreau expresses it, "his cassock is open behind, showing his white robe." Above this is a large check of black and white, and on a line with the ends of his wings, a fine black and white check, while, if he is an adult male, a scarlet patch on the back of his head sets off his black and white dress. Seen only a rod away as I see him from the window, clinging to the side of the tree pecking at the suet hung there for him, the white stripe of his back is marked off above by a black line which goes across to meet the black of his shoulders. From the middle of this another black line goes at right angles, straight up toward his head, so carrying on the line of the white stripe, and forming the dividing line of the two white blocks. This perpendicular line meets the point of a black V so broad as to be almost a straight line. On this V lies the red patch of the back of his head. Over his eye a white line runs back to meet the red patch. What, at a distance, looked like fine ducking at the base of his wings, proves to be wavy white lines running across the black.

The downy comes about us here with the same familiarity as the hairy, and it was only a few weeks ago that the cook brought me one that had gotten caught between the sashes of her window. He was scared, poor little fellow, and wriggled about trying to force my hands open, so when I had taken a look at his pretty brown eyes, I carried him to the front door and off he flew to the nearest tree, where he began pecking away at the bark as calmly as if nothing had happened!

On New Year's morning, as we sat at breakfast looking out on the storm, exclaiming at the twigs and limbs that blackened the snow, and watching the ice-covered branches bowing and tossing in the wind, I caught sight of a downy woodpecker working away on a tree in front of the window as serenely as if it were a balmy summer morning. He hugged the trunk very closely, however, and circled about slowly, pecking at the bark in a cautious manner as if he knew very well the best way to work in a wind. His bravery was contagious, for soon after a partridge—more properly the ruffed grouse—came to the corn boxes in front of the window for his breakfast, and only scudded back under the evergreens to avoid a falling branch. We could see the gray squirrels racing about in the edge of the woods, but they did not venture back to their corn till the next morning, when the storm was less violent.

Of the familiarity of the downy, Thoreau says: "I stole up within five or six rods of a pitch pine behind which a downy woodpecker was pecking. From time to time he hopped round to the side toward me, and observed me without fear. They are very confident birds, not easily scared, but inclined to keep the other side of the bough from you, perhaps."* Here, the downies are even more fearless. I have stood by the foot of a stub on which a hairy was drilling, and watched a downy hunting over a sapling less than ten feet away. I have also made a great noise sweeping the snow off the piazza without disturbing him in the least, though he was eating suet only a rod away.

Under date of Jan. 8, 1854, however, Thoreau says: "Stood within a rod of a downy woodpecker on an apple-tree. How curious and exciting the blood-red spot on its hind head! I ask why it is there, but no answer is rendered by these snow-clad fields. It is so close to the bark I do not

see its feet. * * * It is briskly and incessantly tapping all round the dead limbs, but hardly twice in a place, as if to sound the tree, and so see if it has any worm in it, or perchance to start them. How much he deals with the bark of trees, all his life long tapping and inspecting it. He it is that scatters these fragments of bark and lichens about on the snow at the base of trees. What a lichenist he must be! Or rather perhaps it is fungi make his favorite study, for he deals most with dead limbs. How briskly he glides up or drops himself down a limb, creeping round and round, and hopping from limb to limb, and now flitting with a rippling sound of his wings to another tree."*

WHITE-BELLIED NUTHATCH; DEVIL-DOWN-HEAD.

Crossbills, snow buntings, bluejays, pine finches, pine grosbeaks, goldfinches, and sometimes other birds visit us here during the winter, but there are four little friends that stay by us through all the goings and comings, never deserting us, no matter how long the winter. They form a novel quartette, for the chickadee whistles the soprano, the nuthatch sings his meagre alto through his nose, and the two woodpeckers-the hairy and the downy-beat their drums as if determined to drown the other parts. But they are a merry band, with all their oddities, and wander about giving concerts wherever they go, till the woods seem to be alive again, and we forget that we have ever missed the summer birds.

When the drums get too much absorbed in their tree trunks, the alto and air go out serenading by themselves, and who knows what gossip they indulge in about the grave magicians' day dreams, or how gaily they swear to stand by each other and never be put down by these drums! They are old chums, and work together as happily as Mr.

^{*} Thoreau's "Winter," p. 312.

^{*} Thoreau's "Winter," p. 141-142.

and Mrs. Spratt, the chickadee whistling his merry chick-a-dee-dee, dee, dee as he clings to a twig in the tree top, and the nuthatch answering back with a jolly little yank, yank, yank, as he hangs, head down, on the side of a tree trunk. What a comical figure he makes there; trying to get a look at you, he throws his head back and stretches himself away from the tree, till you wonder he does not fall off. His black cap and slate-blue coat are almost hidden, he raises his white throat and breast up so high. "Devil-down-head" he is called from his habit of walking down the trees, for instead of backing straight down or sidling down backward as the woodpeckers do, he prefers to obey the old adage and "follow his nose." A lady forgetting his name once aptly described him to me as "that little upside-down bird." He will run along the underside of a branch with as much coolness as a fly would cross the ceiling.

One of his popular names is "sapsucker," for our nuthatch has a sweet tooth, and when the farmers tap the trees in spring he "happens round" at the sugar bush to see what sort of maple syrup they are going to have. He tests it well, taking a sip at "the calf" where it oozes out at the gashing of the axe, tasting it as it dries along the spile, and finally on the rim of the buckets. But his most interesting name is -nuthatch! How does he come by it? That seems a riddle. Some cold November day when you are overcome by ennui, and think there is nothing left in the woods to interest you, put by your melancholy longing for summer, and in its place put on a thick pair of boots, and go to visit the beeches. In their tops are the nuthatches, for they have deserted the tree trunks for a frolic. They are beechnutting! And that with as much zest as a party of school children starting out with baskets and pails on a holiday. Watch them now! What clumsy work they make of it, trying to

cling to the beechnut burr and get the nuts out, at the same time. It's a pity the chickadee can't give them a few lessons! They might better have kept to their tree trunks. Think what a sorry time Mrs. Spratt would have had, had she tried to eat the lean! But they persist, and after tumbling off from several burrs, finally snatch out a nut and fly off with it as unconcernedly as if they had been dancing about among the twigs all their days. Away they go, till they come to a maple or some other roughbarked tree, when they stick the nut in between the ridges of the bark, hammer it down, and then, when it is so tightly wedged that the slippery shell cannot get away from them, by a few sharp blows they hatch the nut from the tree! Through my glass I watched a number of them this fall, and they all worked in about the same way, though some of them wedged their nuts into cracks or holes in the body of the tree, instead of in the bark. One of them pounded so hard he spread his tail and almost upset himself.

The fun was so great a downy woodpecker tried it, and of all the big school boys! The excitement seemed to turn his head, and he attacked a beechnut burr as if he would close with it in mortal combat!

Though without any real song, the nuthatch has a delightful variety of notes. In May his nasal henk-a, henk-a, henk-a comes through the soft green woods as a peculiarly peaceful caressing note, and his gentle yang, yang, yang, is full of woodsy suggestions. In the last of June, my note-book records the sweet yah-ha of the nuthatch, the same yang, yang, yang, and his nearest approach to a song, the rapid yah-ha-haha-ha-ha. This is probably what Thoreau gives as "To-what, what, what, what." He records it in March. In August and September the nasal yank is sometimes run into an accelerated half song. Thoreau gives the ordinary winter note as quah, quah, and

^{* &}quot;Early Spring in Massachusetts," p. 70.

while that expresses the mellowness of the note on some days better than yank, they are both descriptive, but though different notes may predominate in given months, I heard this morning—January 18—from a flock of nuthatches, every one of their notes I have ever heard at any time of year.

The nuthatch nests in holes in trees or stumps, and its lightly spotted eggs, six or eight in number, are laid on soft felty lining

I am often surprised by discovering the nuthatch at work in places where I despair of finding any birds. One day in December when I went out the snow-covered woods seemed to have fallen into the silent slumber of a child. Not a breath came to blow the white cap from the vireo's nest, or scatter the heaped-up snow resting like foam on the slender twigs. The snow that had drifted up the side of the tree trunks clung as it had fallen. In silence the branches arched under their freight; the rich ochraceous beech leaves hung in

masses under the snow—not a leaf rustled.

Overhead the twigs outlined in snow made exquisite filigree against the pale blue sky. But suddenly, as the forest seemed to be holding its breath, the yank of the nuthatch came first from one tree and then another. A family of them were looking for their dinner in the white woods. When the snow covered the upper side of a branch, they ran along upside-down on the under side; when the south side of a tree trunk was white they ran, head down, on the north side; and there, too, was the little drummer-a downy woodpecker, flickering from tree to tree—even here, the merry band was finding a place for itself in nature. As I passed on, fainter and fainter came the note of the nuthatch. I looked back through the woods; the blue sky was veiled by snow clouds, but behind them shone the southern sun, pervading them with that wondrous radiance of white light that only a winter sky can show.

FLORENCE A. MERRIAM.

A GNATCATCHER'S STRATEGY.

LMOST every young naturalist knows what a pretty home the little bluegrav gnatcatcher (Polioptila cærulea, Linn.) constructs. Each pair, after mating, seek some tree with a grayish bark, usually an oak, maple or apple, and finding a horizontal limb or convenient fork, they begin their nest, building it principally from hair and the fine fibres of various plants which they weave very closely and compactly together. Finally they cover the whole with a coat of lichens, fastening them on with the finest of wool or the silk of spiders' webs. lichen covering serves the useful purpose of a mask, rendering the color of the nest almost exactly that of the bark of the tree on which it is built, thus hiding it from the keen eye of the young oölogist walking be-

neath, or the keener eye of the crow or hawk flying above. But there is one eye sharp enough to detect it. For no matter how deep and dark the ravine in which a nest is hidden away; no matter what aid of nature has been called into use in rendering it inconspicuous to the view of other animals, necessity seems to lend a preternatural sharpness to the vision of the female cowbird, enabling her to discover, whenever needed, a safe place of deposit for an egg, destined to become at no distant day an orphan which will be a heavy burden to its foster parents.

The nest of the blue-gray gnatcatcher when completed, is usually very small, and is cylindrical in form, not hemispherical, like that of most other birds. One which

contained five eggs, taken on the 2d of last May, was but 5 % inches in circumference by 23/8 inches in length, and weighed only 3.7 grams. But the cowbird cares nothing for the size or form of the chosen asylum for her young. If it is only large enough for one egg, it is sufficient for her wants, and she forthwith appropriates it to her use without even a "by your leave" to the rightful owners. And so, very often, among four or five delicate little gnatcatchers, there is found a large chuffy youngster, whose demand for food is incessant, and if supplied in sufficient quantity, he will in a day or two fill the entire nest, and smother beneath his greater bulk the lives of the lawful occupants. It is one of those numerous cases of a struggle for existence in which the most overbearing, ugliest, and strongest survives, instead of the fittest.

However, I suppose that the modern evolutionist would say, that in this case ugliness and brute strength are necessary qualities of the "fittest," and that nature has ordained that the cowbirds shall increase in numbers as the "Jay Goulds" of to-day grow in wealth, only at the expense of their weaker brethren.

But one—or rather two—cowbirds' eggs laid last season did not hatch, and it was of them that I started to write. On the 22d of April, while out for a walk, I discovered a pair of gnatcatchers building in a maple tree about thirty feet from the ground. A week later on passing near the spot, I saw that the nest had assumed massive proportions for one of that species, and on climbing up to investigate, found that it contained a single cowbird's egg. The owners, however, had not deserted it, for they soon appeared, circling rapidly around, and uttering their shrill cries of distress. I left them immediately, merely supposing that they were young birds, not fully up to the times in nest building, and therefore had formed a large, loosely-constructed nest, instead of a small compact one, as is usually the case.

On the 5th of May I again visited the tree, and found that the birds had abandoned the nest without laying in it, and were building a new one in the top of a tall oak a short distance away. Removing the old nest carefully I carried it home in order to compare more closely its size with the one taken a few days before. Judge of my surprise when, on examining it thoroughly, I found that it was a double nest, or rather a "two-story" one. The lower part, or first floor, was neatly and closely built, and in it was found a second cowbird's egg. It had evidently been laid shortly before the nest had reached the usual size of such structures, and the builders, on discovering it, had immediately set to work and covered it entirely over, and then built up the sides of their house about 21/2 inches higher. But, alas, for the expectations of our feathered friends! No sooner had the second floor neared completion than Mrs. Cowbird paid them another visit, and left behind her a reminder in the shape of a new egg. It was too much for bird endurance. They deserted in disgust the home over which they had spent so many anxious moments, and set to work to build a new one, in which, let us hope, they reared their little family unmolested by unwelcome guests. measuring carefully the double nest I found its circumference to be 91/2 inches; its length, 41/8 inches; and its weight 12 grams, or about 31/3 times that of the one first taken. The upper 21/2 inches was very loosely constructed, and had evidently been built in a hurry to meet the exigencies of the case. The new nest in the oak was too high for close observation, but seemed from the ground to be only of normal size.

THE AUDUBON NOTE BOOK.

MEMBERSHIP RETURNS.

THE registered membership of the Society on Jan. 31, 1888, was 43,683, showing an increase of 696 members during the month, due to the following sources:

New York	284	Missouri	13
Massachusetts	114	Ohio	19
New Hampshire	14	Michigan	13
New Jersey	59	Rhode Island	2
Maine	26	California	I
Connecticut	4	District of Columbia	I
Vermont	6	Minnesota	13
Pennsylvania	17	North Carolina	30
Maryland	2	South Carolina	8
Kentucky	13	Texas	1
Kansas	2	Dakota	1
Iowa	39	Colorado	I
Illinois	11	Canada	
			696

C. F. AMERY, General Secretary.

THE DOG AND THE UMBRELLA.

WE had all told a story illustrating some traits of different animals, or recounting some curious fact about them, all but one. He was an old gentleman of almost eighty, but his eye was not dim, and if his natural force was abated, he was yet a marvel of physical vigor and of mental strength. His reminiscences were always interesting, many of them fascinating. He told us a story about a dog.

"About the year 1875," he said, "I visited in an Illinois city and met with this adventure. I was walking along a suburban street, where there was but a single house beyond the corner I had passed. I was carrying my umbrella in my left hand, untied, but not unfolded. In the middle of the street I met a large bulldog approaching. I am an admirer of the well-developed bulldog, and this one was very handsome. As we neared each other I smiled upon him and said: 'You're a fine fellow.' The next instant I was on my back on the ground, his feet on my breast, and his face in mine. There was no one near and all I could do was to call 'murder' as loud as I could. The dog instantly retreated, going on his way as before the attack. I arose from the ground, and taking up my umbrella, was about to resume my way, when the dog looked back, and seeing me up, turned and rushed at me again. My action was the instinct of the moment. Presenting my umbrella as a bayonet, I rushed upon him with a loud outcry. It brought us close to each other-not three feet apart-when lo! he turned and fled.

"My coat was destroyed, my hand scratched, but I suffered no other injury. Relating the circumstance at the dinner-table, my friends persuaded me that I

ought to inform the authorities. I did so, but leaving that afternoon heard no more about it for that time.

"But afterward I learned that the dog was not vicious, but that he had a dislike to an umbrella. Having in the first onslaught knocked it out of my hands he withdrew from me; when I took it up he renewed the attack; and when I charged upon him fear overcame him and he fled. I cannot tell how sorry I was that I had informed upon him, nor how glad that he had escaped punishment and lived to protest against other umbrellas than mine."

MRS. GEO. ARCHIBALD.

AN ACCOMPLISHED BLUEJAY.

An old colored man in this place owns a bluejay that he raised from a nestling and to which he is very much attached. Old Joe's jay cuts up some very funny capers that are quite astonishing to one that knows nothing more of him than what is seen of him in the fields; he is an excellent whistler and quite an imitator, he can call the dog so that you would be sure it was some person whistling for him, and, in addition to this, he can imitate the whine of the dog, the chirp of other birds, and in fact the cry of a baby. Joe lets his bird loose in his room, and the other day while he was nailing something, he stepped out for a few minutes, laying down a handful of nails. On his return to the room not a nail was to be found, nor have they been discovered up to date. When found they will probably be in places where no one would think of looking for them.

Greenville, Pa. W. T. Alan.

CLOUDS OF BIRDS.

THE writer of "Under the Rays of the Aurora Borealis" gives a vivid picture of a scene in the Arctic regions. The steamer was passing the northern shore of the Scandinavian peninsula, the great frozen North on the one side, and on the other what seems a continuous mountain wall, falling straight into the sea.

"At length we round the cape of the peninsula, the famous bird-mountain Svaerholtklub, jet black in color, one of the most remarkable sights in the world.

"Along every one of the innumerable terraces, caused by the stratiform formation of the mountain, and all of which run nearly horizontal, white birds sit in rows, like the porcelain jars in a druggist's shop, one above the other, so close that the mountain in many places has the appearance of being covered with snow.

"A jet of smoke issues from the port side, and the

next moment the report of a gun reverberates through the air. In a second we gaze on one of the grandest and most marvellous spectacles it is given human eves to behold.

"From every terrace and cavity in the mountain snow-white birds issue in millions—looking at first like a gigantic foaming torrent—which rise and descend in enormous flocks, with deafening cries, and so great is their number that at times mountain, sky, and sun are obscured."

THEN AND NOW.

Editor Audubon Magazine:

Looking over the "Recollections of Mary Somerville," the most distinguished of scientific women in the last generation, I observed her statement as to birds, which is so much in the line of your valuable magazine that I venture to copy it:

"We fed the birds when the ground was covered with snow, and opened our windows at breakfast time to let in the robins, who would hop on the table to pick up crumbs. The quantity of singing birds was very great, for the farmers and gardeners were less cruel and avaricious than they are now—tho' poorer. They allowed our pretty songsters to share in the bounties of Providence.

"The shortsighted cruelty, too prevalent now, brings its own punishment, for, owing to the reckless destruction of birds, the equilibrium of nature is disturbed, and insects increase to such an extent as materially to affect every description of crop. This summer (1872) when I was at Sorrento, even the olives, grapes and oranges were seriously injured by the caterpillars—a disaster which I attribute entirely to the ruthless havoc made among every kind of bird."

A CURIOUS FLOATING ISLAND.

E.

HENRY'S LAKE is one of the wonders of the Rocky Mountains. Directly on the summit of the continental divide, in a depression or gap called Targee Pass, is a body of water that was given the above name in honor of an old trapper who made his home on its borders for several years in the enjoyment of sweet solitude.

Henry's Lake is oval in shape and has an area of forty square miles. It is entirely surrounded by what seems to be solid land, and one readily concludes that it has no outlet. On the west side lies a level meadow, which floats on the water, and the hidden outlet is beyond it. Near the rim of the basin, which at no distant day must have been the pebbly beach of the lake, is a shallow pool, out from which flows a creek—the source of the north fork of Snake River.

A species of blue joint grass of luxuriant growth floats upon the water and sends out a mass of large

hollow white roots, which form a mat so thick and firm that a horse can walk with safety over the natural pontoon. The decayed vegetation adds to the thickness of the mat and forms a mould in which weeds, willows and small trees take root and grow. Back from the new border the new land is firm and supports pine and aspen trees of small growth.

An island of the same turf formation floats about the lake. The floating body of land is circular and measures 300ft. in diameter. A willow thicket thrives in the center, interspersed with small aspens and dwarf pines. The little trees catch the breeze and are the sails that carry the island on its orbit. One evening it was within a stone's throw of our camp. At daylight next morning it was five miles away.—

Cor. San Francisco Examiner.

THE Humane Journal, of Chicago, is a bright little publication, and fresh and breezy as becomes a journal of established position and recognized worth. Its illustrations are really of a high order of merit and the literature in good tone, and written to good purpose. Mr. Albert W. Landon, the editor, has some very pleasant and appreciative words in the January number, for Mesdames Gause, Meiser and other helpers of the journal, and the cause it represents. The ladies above mentioned have just returned from a tour of Michigan, where they have been stirring up the clergy, the people and the press to practical efforts for the suppression of cruelty to the dumb heast.

Measures for the collection of the funds for the proposed Audubon monument have been organized and the design selected. We hoped to have been able to give a rough sketch of the design in our current number, but the absence from the city of Professor Egleston, President of the Central Committee, has caused delay in getting the electrotypes finished. The general design is a Runic cross, in bluestone, the surface of which will be relieved by figures of typical birds and other allusions to Audubon's labors. The base is to be ornamented by a life-sized medalion of the great naturalist.

A New Year's Offering for the Birds.—An old custom among farmers is to put on the ridge-poles of their barns on New Year's day a sheaf of wheat with heavy heads of grain, intended as a peace offering to the birds. Some of these offerings were seen last New Year's day on New Jersey barns, with flocks of small birds fluttering about them.

WE are indebted to G. Brown Goode, Esq., of the National Museum, and Assistant Secretary of the Smithsonian Institution, at Washington, for the cut of Professor Baird, which has been used to illustrate our notice of that distinguished naturalist.

EMINENT PEOPLE ON BIRD PROTECTION.

OAK KNOLL, Danvers, Mass., \ 2nd mo., 20, 1886.

Editor Forest and Stream:

I heartily approve of the proposed AUDUBON So-CIETY. We are in a way to destroy both our forests and our birds. A society for the preservation of the latter has long been needed, and I hope it is not too late for the accomplishment of its objects.

I could almost wish that the shooters of the birds, the taxidermists who prepare their skins, and the fashionable wearers of their feathers might share the penalty which was visited upon the Ancient Mariner who shot the Albatross. Thy friend,

JOHN G. WHITTIER.

Brooklyn, N. Y., Feb. 20, 1886.

Editor Forest and Stream;

I am heartily in sympathy with your purposes for the protection of birds, and should be glad to contribute any influence that I can to that end.

If there were no purchasers there would be no demand, and no reason for slaughtering these winged gems. But as only women create a demand, it rests upon them to stay this wanton destruction. I am sure that it is only necessary to bring before American women the cruelty of this "slaughter of the innocents" that fashion is carrying on, to secure a renunciation of this ornament and the salvation of birds.

On this subject the kind feelings, the taste, and æsthetic sympathy of the whole community are on your side, and if you persevere you will surely win.

HENRY WARD BEECHER.

CORNWALL-ON-HUDSON, N. Y., Feb. 22, 1886.

Editor Forest and Stream:

You have indeed my hearty sympathy in every effort to prevent the slaughter of my innocent little neighbors and friends, the birds. In the destruction of forests and birds, the people of this land are inviting very great evils and inflicting wrongs on posterity which scarcely can be measured. The press should render it impossibe for women to sin thoughtlessly and ignorantly in demanding little birds for their adornment. The evil should be brought home so fully to the knowledge of all, that the continued wearing of our useful little birds should become the badge and indication of a callous, vulgar nature. You are doing a humane and patriotic work in exciting public aversion to one of the most cruel and stupid wrongs of the age.

> Respectfully yours, EDWARD P. ROE.

WEST PARK, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I scarcely need assure you that your undertaking to form a society for the protection of our wild birds against the ravages of the milliners and the sham scientific collectors has my warmest sympathy and approval. It is a barbarous taste which prompts our women and girls to appear upon the street with their head gear adorned with the scalps of our songsters; and it is mere vanity and affectation which prompts so many persons to make up cabinets of the nests and eggs of the same. The destruction of our birds from their natural enemies is immense, and this craze of the collectors, and folly of the milliners and their customers in addition, threatens their serious diminution

I hope you may succeed in creating so strong a public sentiment upon the subject that the collectors of skins and eggs for the unworthy purposes of fashion or to indulge the vanity of pseudo-naturalists may suddenly find their occupation gone.

Please add my name to the list of the members of the Audubon Society. Very sincerely,

JOHN BURROUGHS.

160 W. 59TH STREET, NEW YORK, Feb. 20, 1886.

Editor Forest and Stream:

No one who will take the trouble to give the matter a few moments' serious consideration can be in doubt, I think, as to the wisdom of organizing the AUDUBON SOCIETY, and I am thankful that such a step is contemplated. There is an element of savagery in the use of birds for personal decoration, which is in grotesque contrast with our boasts of civilization. But even the savage stops short, as a rule, with the feathers. It is only Christian people who think it worth while to butcher a whole bird to adorn their head gear. I am sure, however, that this is largely from that unreflecting habit which is a leading vice in people who follow the fashions. But it is a vice; as Hood sang, when he wrote-

> For evil is wrought By want of thought As well as by want of heart.

If the AUDUBON SOCIETY can teach men, and especially women, to think on this subject, half of the battle will have been won. HENRY C. POTTER.

ANDOVER, Mass., Feb. 21, 1886.

Editor Forest and Stream:

I am in earnest and indignant sympathy with the motive of any society organized to prevent the murder of birds for decorative purposes.

E. S. Phelps.





THE MOCKINGBIRD.

(Mimus polyglottos (LINN.))

THE AUDUBON MAGAZINE.

Vol. II. APRIL, 1888. No. 3.

THE MOCKINGBIRD.

CWEETEST of all the song birds of America, the Mockingbird stands without a rival, perhaps in the world. who are familiar with its melody and have had an opportunity to compare its powers with those of Old World songsters, agree that it surpasses even the famous nightingale in the richness and beauty of its strains. Nuttall says: "With the dawn of morning, while yet the sun lingers below the blushing horizon, our sublime songster, in his native wilds, mounted on the topmost branch of a tall bush or tree in the forest, pours out his admirable song, which amidst the multitude of notes from all the warbling host, still rises preëminent, so that his solo is heard alone, and all the rest of the musical choir appear employed in mere accompaniments to this grand actor in the sublime opera of nature. Nor is his talent confined to imitation; his native notes are also bold, full, and perpetually varied, consisting of short expressions of a few variable syllables, interspersed with imitations, and uttered with great emphasis and volubility, and sometimes for half an hour at a time, with undiminished ardor. These native strains bear a considerable resemblance to those of the brown thrush. to whom he is so nearly related in form, habits and manners; but, like rude from cultivated genius, his notes are distinguished by the rapidity of their delivery, their variety, sweetness and energy. As if conscious of his unrivaled powers of song, and animated by the harmony of his own voice,

his music is, as it were, accompanied by chromatic dancing and expressive gestures; he spreads and closes his light fanning wings, expands his silvered tail, and with buoyant gayety and enthusiastic ecstacy he sweeps around, and mounts and descends into the air from his lofty perch, as his song swells to loudness, or dies away in sinking whispers. While thus engaged, so various is his talent, that it might be supposed a trial of skill from all the assembled birds of the country; and so perfect are his imitations that even the sportsman is at times deceived, and sent in quest of birds that have no existence around him."

The song of the Mockingbird is not limited to the hours of daylight. He sings by night as well, and as sweetly as in the full glare of the sun, his clear full notes being most often heard after the rising of the moon. Indeed, according to Wilson, the hunters in the Southern States, when setting out on an excursion by night, know as soon as they hear the Mockingbird begin to sing, that the moon is rising.

His wonderful powers of mimicry are so well known that it is unnecessary to refer to them at length, but we may quote a fragment of Wilson's graphic description. He says: "In his domesticated state, when he commences his career of song, it is impossible to stand by uninterested. He whistles for the dog; Cæsar starts up, wags his tail, and runs to meet his master. He squeaks out like a hurt chicken, and the hen hurries

about with hanging wings and bristled feathers, clucking to protect its injured brood. The barking of the dog, the mewing of the cat, the creaking of a passing wheelbarrow, follow with great truth and rapidity. He repeats the tune taught him by his master, tho' of considerable length, fully and faithfully. He runs over the quiverings of the canary, and the clear whistlings of the Virginia nightingale, or redbird, with such superior execution and effect, that the mortified songsters feel their own inferiority, and become altogether silent; while he seems to triumph in their defeat by redoubling his exertions.'

The Mockingbird is essentially a creature of the South, and his center of abundance is in the Southern States. It is there, as Audubon so delightfully remarks, that the Mockingbird must be seen to find him at his best. Still, he sometimes journeys during the summer months as far north as Massachusetts, and has been found breeding in the Connecticut Valley near Springfield. In the Southern States the Mockingbird is a resident, and may be found at all seasons of the year. Those which visit the North stay with us only long enough to rear their brood, and then hastily retreat to warmer climes.

In its Southern home this species is tame and familiar, seeming to regard man as a friend and protector rather than an enemy. It sometimes builds its nest near the house, and, Audubon tells us, lives during the winter about the gardens and outhouses, where it may be often seen perched on the roofs and on the chimney tops.

The mating season in Louisiana is March or early April, and the nests are begun immediately after, so that the young are frequently ready to fly by the last of April. Further north they are somewhat later in making their appearance. The nest is built not far above the ground, sometimes upon it, and is carelessly constructed with but slight attempt at concealment. In some re-

spects it resembles that of the cathird, being composed externally of coarse twigs and weed stems, and lined with fibrous roots.

The eggs are from four to six in number, and are light green in color, dotted and blotched with brownish black. Two and sometimes three broods are raised in a season.

If the female leaves her nest for any purpose, and finds on her return that the eggs have been handled, she summons her mate by a mournful note and exhibits much distress, but so far from deserting it, as some people suppose, she sits with redoubled assiduity.

Except during the winter the food of the Mockingbird consists almost entirely of insects, but when cold weather has deprived them of this food they turn their attention to the berries, feeding on those of the cedar, the Virginia creeper, the holly, smilax, sour gum and others.

The Mockingbird is easily reared if taken from the nest quite young, and becomes not only a sweet and constant songster, but an affectionate pet as well. Instances are known where they have lived about the house without being confined, flying away from time to time to feed and associate with their kind, but returning toward night to their home, where they saluted their owner with every demonstration of delight and affection.

The Mockingbird is from nine to ten inches in length, and the spread of its wings measures thirteen inches. The upper parts of the body are dark gray, tinged here and there with brown. A spot of white exists on the primaries, making a large patch on the closed wing. The wing coverts are tipped with white; the three outer tail feathers are mostly white. The under parts are brownish white, palest on chin and belly. Bill, legs and feet are black. Iris yellow. The female differs from the male only in having the colors a little duller, and the white patch on the wing smaller.

HINTS TO AUDUBON WORKERS.*

FIFTY COMMON BIRDS AND HOW TO KNOW THEM.

APPENDIX.

A S the birds are hurrying north now, and new forms are seen and new songs heard every day, it may be a help to summarize the facts gathered about our "fifty common birds," so that you can recognize them more readily in the field, and can get clues to the other birds, common and uncommon, that are still to be studied.

You have probably noticed already that the birds migrate at night, and may have speculated on their reasons—the greater prominence of the landscape sign posts, such as rivers and mountains, in the night; the fact that the pot-hunter and the wicked small boy are securely tucked between the sheets then, so that only the kindly astronomer notes their flight; the greater coolness of the night air; and—who can say that the Dipper points no guiding North Star for them?

But wherever speculation leads you, it does not affect the course of the birds, and when morning comes you will find that each bird, or flock of birds, is looking for breakfast in its own favorite locality—not always the sort of spot it chooses to nest in, but one marked enough to show individual taste. As this suggests, of course, the true way to see all the birds that pass is to go carefully through all the varieties of forest and field-dense woods, clearing, marsh and meadow. But if you have not time for this every day, the best way is to have a short beat and go over it, if possible, every morning and evening. Take the sunny side of an open woods, or even an old orchard or garden, and if you watch closely, you will see an astonishing number of old friends before the season is over. And if you know only a few birds, spring is the best time to make new friends. It is altogether easier than fall. The songs are in their perfection, and plumage is most strongly marked. In the fall, the old birds come back more intent on talking than singing; and then, besides wearing motley themselves, bring with them a troop of youngsters that may be masquerading for all you could guess of their ancestry, unless you knew the secret of their dominos.

Moreover, in April and May the birds give us an excuse for getting out into the spring, and their jubilant happiness covers any poetic lapse, or childish exuberance of spirit our staid blase selves may be startled into. Spring!—let the poets sing of it, and listen to them if you will, but you can never know what they mean or what spring is until you have felt the first tremulous warble of the bluebird, and picked wild flowers in the hermitage of the "swamp angel."

GENERAL FAMILY CHARACTERISTICS OF BIRDS TREATED,

WOODPECKERS.

Plumage, largely black and white. Bill, strong and long for drilling through bark and wood. Flight, noisy, flickering. Call, loud and shrill. Song, wanting, except as they drum on trees, etc. Habits, phlegmatic, most of time spent clinging, erect, to sides of tree trunks. (Exception, yellowhammer: Plumage, brownish, instead of black and white; nest lower; song, a loud full trill; habits, more like ground woodpecker; haunts ant hills, fields and fence posts, etc.)

FLYCATCHERS.

Dull, gray birds with big heads and shoulders. Males and females similar in plumage. Bills hooked at end. Songless or with short song (wood pewee, three notes). Habits, hunt by lying in wait for insects and then springing at them with nervous spasmodic movements. (Exception, kingbird: Largely silent and motionless when not watching for food.)

BLACKBIRDS AND ORIOLES.

Plumage, striking, black prominent. (Exception,

meadowlark.) Females generally duller, and in some cases smaller than males. Bills and claws, strong; bills long and conical. (Exceptions, bobolink and cowbird, whose bills are short and conical.)

SPARROWS AND FINCHES.

Fine songsters. Bills short, stout, cone-shaped, for cracking seeds.

Sparrows—Comparatively small, dull plumaged birds, with striped backs, males and females similar. Finches—Bright plumaged birds, females duller than males.

VIREOS.

Small olive-green or gray-backed, white-breasted

birds. Bills, long and slender, for holding worms. Songs, loud. Nests, pensile and delicate.

WARBLERS.

Plumage, mostly variegated and brilliant. Females generally duller than males. Song, in many cases only a trill. Food, insects. Habits, nervous, restless.

THRUSHES.

Brown-backed, white-breasted birds, size of robin, or smaller. Bills, long and slender, fitted for worm diet. Habits, phlegmatic; pensive birds, fond of sitting motionless on lower branches of small trees. Finest of American songsters.

ARBITRARY CLASSIFICATIONS OF BIRDS DESCRIBED IN THE FOREGOING ARTICLE.

- I. BIRDS FOUND IN CERTAIN LOCALITIES.
- About or near Houses.—Robin, chipping sparrow, song sparrow, junco, chimney swift, crow blackbird, warbling vireo, yellow-bellied woodpecker, tree sparrow, fox sparrow, brown creeper, oriole, phoebe, purple finch, chickadee, catbird, redeyed vireo, nuthatch.
- In Gardens and Orchards.—Catbird, bluebird, waxwing, cuckoo, oriole, kingbird, kinglets, hummingbird, warbling vireo, yellow-throated vireo, yellow-bellied woodpecker, purple finch, goldfinch, summer yellowbird, warblers, cowbird, least flycatcher, yellowhammer.
- In Fields and Meadows.—Meadowlark, cowbird, nighthawk, crow, bank swallow, barn swallow, cliff swallow, vesper sparrow, field sparrow, bobolink, red-winged blackbird, snowflake, song sparrow.
- 4. In Bushes and Clearings.—White-throated sparrow, song sparrow, chipping sparrow, tree sparrow, field sparrow, white-crowned sparrow, junco, Maryland yellowthroat, kinglets, chewink, brown thrasher, rose-breasted grosbeak, catbird, robin, purple finch, goldfinch, winter wren.
- By Streams and Rivers.—Phœbe, waxwing, bank swallow, kingfisher, yellow warbler, red-winged blackbird, Maryland yellowthroat.
- 6. In Woods.—Thrushes, wood pewee, ovenbird, black and white creeper, woodpeckers, junco, nuthatch, grouse, great crested flycatcher, chewink, whippoorwill, tree sparrow, fox sparrow, brown creeper, scarlet tanager, chickadee, Blackburnian warbler, crossbills, vireos, red-

- start, black-throated blue warbler, yellow-rumped warbler, winter wren.
- 7. Edge of Woods.—Rose-breasted grosbeak, cowbird, redstart, wood pewee, woodpeckers, kingbird, cuckoo, ovenbird, bluebird, hummingbird, chickadee, chewink, great crested flycatcher, brown thrasher, yellow-bellied woodpecker, tree sparrow, white-throated sparrow, white-crowned sparrow, fox sparrow, brown creeper, thrasher, vireos, oriole, purple finch, junco, warblers, yellowhammer, winter wren.
- Roadside Fences.—Bluebird, flicker, kingbird, redheaded woodpecker, goldfinch, white-crowned sparrow, field sparrow, vesper sparrow, song sparrow, white-throated sparrow.
- Thickets.—White-throated sparrow, song sparrow, Maryland yellowthroat, chickadee, junco, chewink, brown thrasher, white-crowned sparrow, field sparrow, catbird, Wilson's thrush, warblers (in migration), winter wren (in migration), chestnut-sided warbler.
- Pine Woods.—Warblers, kinglets, chickadee, brown thrasher, whippoorwill, white-crowned sparrow, crossbills, purple finch, nuthatch woodpeckers.

II. SIZE COMPARED WITH THE ROBIN. SMALLER THAN THE ROBIN.

 Less than half as large.—Kinglets, chipping sparrow, goldfinch, chickadee, nuthatch, Blackburnian warbler, summer yellowbird, Maryland yellowthroat, redstart, winter wren, least flycatcher, hummingbird, tree sparrow, field sparrow, brown creeper, yellow-throated vireo, warbling vireo.

- About half as large.—Swift, red-eyed vireo, ovenbird, crossbills, wood pewee, purple finch, song sparrow, junco, indigo bird.
- More than half as large.—Phœbe, bluebird, waxwing, downy woodpecker, barn swallow, bank swallow, cliff swallow, vesper sparrow, white-crowned sparrow, fox sparrow, white-throated sparrow, bobolink, oriole, scarlet tanager, snow bunting.

ABOUT THE SAME SIZE AS THE ROBIN.

Rose-breasted grosbeak, cowbird, red-headed woodpecker, hairy woodpecker, yellow-bellied woodpecker, chewink, great crested flycatcher, redwinged blackbird, catbird, thrushes, kingbird.

LARGER THAN THE ROBIN.

Yellowhammer, kingfisher, crow, grouse, orown thrasher, whippoorwill, meadowlark, cuckoo, nighthawk, keel-tailed blackbird, bluejay.

III. COLORS.

COLORS STRIKING OR BRIGHT.

- Blue backs.—Bluejay, bluebird (azure blue), nuthatch (slate blue), kingfisher (slate blue) indigo bird, black-throated blue warbler.
- 2. Chestnut or red breasts.—Bluebird, robin, crossbills (male), scarlet tanager (male), chewink.
- Yellow or orange throats.—Blackburnian warbler, Maryland yellowthroat, summer yellowbird.
- Yellow or orange breasts.—Yellow-throated vireo, summer yellowbird, goldfinch, oriole, meadowlark, Blackburnian warbler, Maryland yellowthroat.
- Red patch on top or back of head in males.—Rubycrowned kinglet, woodpeckers, kingbird.
- Red heads (entire head and neck red or madder-pink.

 —Purple finch (old males), crossbills (males).
- 7. Birds wholly or largely black (males).—Blackbirds, crow blackbird, red-winged blackbird, cowbird, redstart (salmon patches on breast, wings and tail), bobolink (whitish patches on nape of neck and back), rose-breasted grosbeak (carmine patch on breast, belly white), crow.

COLORS DULL OR PLAIN.

- Upper parts olive-green.—Breast unspotted: Kinglets (patch of red or yellow in crown), warbling vireo (top of head unmarked), tanager (female), crossbills (females). Breast spotted: Ovenbird (crown patch orange-brown bordered with black)
- Upper parts olive-gray.—Cuckoos (tail very long, bill curved).
- 3 Upper parts dusky grayish-olive. Phœbe (length

- about 7 inches), wood pewee (length about 6 inches), least flycatcher (length about 5 inches).
- 4. Upper parts brown.
 - a. Back without markings of any kind: Indigo bird (female), brown thrasher (breast spotted, tail very long), Wilson's thrush (breast spotted, tail short), hermit thrush (breast spotted, tail short and red), winter wren (back barred).
 - b. Back more or less streaked: Meadowlark (below yellow with black collar), female rosebreasted grosbeak (rose of male replaced by saffron yellow), bobolink (female and male in winter, buffish-yellow below), purple finch (female).

Sparrows:

- c. Breast unspotted in adult: Chipping (crown brick red), white-throated (yellow spot in front of eye).
- d. Breast spotted or streaked: Song (no white on tail).
- 5. General color chiefly black and white .
 - a. In large patches or areas: Snowflake, bank swallow, rose-breasted grosbeak (male), redstart (male).
 - b. In stripes: Black and white creeper.
 - c. In spots (above, white below): Hairy woodpecker, downy woodpecker.
- Yellow band across end of tail.—Waxwing (high crest).
- White band across end of tail.—Kingbird (low crest).
- Crown and throat black (size small).—Chickadee (back dull ash-gray).
- 9. General color sooty.—Chimney swift.
- General color slate.—Junco (belly and outer tail feathers white).

BRILLIANT MALES CHANGING TO DULL COLORS OF FEMALES IN AUTUMN.

Bobolink (becomes almost sparrowy in appearance), goldfinch (becomes flaxen-brown above and brownish-yellow below), scarlet tanager (becomes greenish-yellow), yellow-rumped warbler (becomes brownish).

BIRDS SHOWING WHITE ON TAIL FEATHERS IN FLIGHT.

Meadowlark, vesper sparrow, junco, chewink, rosebreasted grosbeak, several warblers.

IV. Songs.

 Particularly plaintive.—Bluebird, white-throated sparrow, hermit thrush, meadowlark, wood pewee.

- Especially happy.—Chickadee, song sparrow, gold finch, indigo bird, bobolink.
- Short songs.—Robin, chickadee, bluebird, Maryland yellowthroat, meadowlark, great crested flycatcher, whippoorwill.
- Long songs, with definite beginning, middle and end.—Hermit thrush, indigo bird, thrasher, chewink, song, field, tree, white-crowned and white-throated sparrows.
- Long songs, without definite beginning, middle and end.—Purple finch, catbird, goldfinch.
- Long loud songs.—Oriole, scarlet tanager, ovenbird, rose-breasted grosbeak, chewink, winter wren, brown thrasher.

TRILLERS.

(Saying tee-ka-tee-ka-tee-ka, or words to that effect.)

Low.—Redstart, summer yellowbird, black and white

creeper, junco, chippy, brown creeper, swift (saying chippy-chippy-chirio), nuthatch.

Loud.—Yellowhammer (if-if-if-if-if-if-if), king-fisher (alarm), ovenbird (saying teacher).

V. PECULIARITIES OF FLIGHT.

Conspicuously tail-steering: Keel-tailed blackbird. Undulating flight: Goldfinch, woodpeckers.

Circling flight: Swallows and nighthawks.

Labored flight: Bobolink, meadowlark and sparrows.

Fluttering flight: Chimney swift.

Particularly direct flight: Robin, cuckoo, keel-tailed blackbird, kingfisher, oriole.

VI. BIRDS WITH HABIT OF SONG-FLIGHT.

Cowbird, bobolink, ovenbird, bluebird, kingbird, swift, woodpeckers, red-shouldered blackbird, indigo bird, song sparrow, Maryland yellow-throat, meadowlark, kingfisher, cuckoo, gold-finch, nighthawk, purple finch.

VII. MARKED HABITS.

- Phlegmatic, meditative, fond of sitting quietly.— Waxwing, robin, thrushes, white-throated sparrow, meadowlark, wood pewee, woodpeckers.
- 2. Restless, constantly flitting about.—Winter wren, kinglets, chickadee, warblers, crossbills.
- Loquacious.—Catbird, purple finch, crow blackbird, bluejay, red-eyed vireo, ovenbird, swift, chippy, bobolink.

VIII. BIRDS THAT WALK INSTEAD OF HOPPING.
Keel-tailed blackbird, red-winged blackbird, crow,
partridge, cowbird, ovenbird, meadowlark.

IX. SHAPE OF BILL ADAPTED TO FOOD.

- I. Short and stout, for cracking seeds.—Grosbeak, crossbills (crossed for getting out spruce and pine seeds), purple finch, indigo bird, junco, snow bunting, bobolink, vesper, tree, field, fox, and white-crowned sparrows.
- 2. Long and slender for holding worms.—Thrushes, warblers, orioles, kinglets, brown creeper.
- 3. *Hooked at end to hold insects.*—Vireos, flycatchers, kingbird, phœbe, pewee.
- Long and heavy for drilling holes in trees.—Woodpeckers.

X. WHERE CERTAIN BIRDS NEST.

- I. On the ground.—Meadowlark (meadows and fields), white-throated sparrow, partridge, snow bunting, nighthawk, bobolink, junco, ovenbird, song sparrow, hermit thrush, Maryland yellowthroat, black and white creeper.
- 2. In holes .-
 - a. Holes in trees and stubs: Woodpeckers, nuthatch, chickadee, bluebird, great crested flycatcher.
 - b. Holes in river and other banks: Kingfisher, bank swallow.
- In orchards.—Kingbird, goldfinch, waxwing, summer yellowbird, chipping sparrow, catbird, robin, bluejay, redstart, cuckoo, least flycatcher.
- About houses, sheds and barns.—Robin, phœbe, eave swallow, chimney swift, bluebird (in knotholes in outhouses or in bird boxes), chipping sparrow.
- In bushes.—Cuckoo, chipping sparrow, catbird, rose-breasted grosbeak, red-eyed vireo, Wilson's thrush, red-winged blackbird, song sparrow, yellow warbler, indigo bunting.
- In low trees.—Tanager, chestnut-sided warbler, yellow warbler, redstart, red-eyed vireo, purple finch, kingbird, hummingbird, least flycatcher.
- In high trees.—Robin, oriole (especially in elms), crow blackbird, purple finch, vireo, wood pewee, Blackburnian warbler, crossbills, hummingbird.
- 8. In other birds' nests.—Cowbird, cuckoo (rarely).
- 9. In crevices of logs or stumps.—Winter wren.
- 10. Under bark on trees .- Brown creeper.

XI. BIRDS THAT ARE SEEN IN FLOCKS WHEN NOT NESTING.

Cedarbird, nighthawk, bobolink, white-throated sparrow, junco, chickadee (small parties), nuthatch (small parties), bluejay (small parties), swift, crossbill, purple finch, bluebird, goldfinch, kinglet, warblers, snowbird, blackbirds, chimney swift, crow, swallows, vesper sparrow, tree sparrow.

LIST OF BIRDS DESCRIBED, IN ORDER OF RELA-TIONSHIP.*

I. Cuckoo.

2. Kingfisher. 3: Hairy woodpecker.

4. Downy woodpecker.

5. Golden-winged woodpecker.+

6. Nighthawk.‡

7. Chimney swift.+

8. Kingbird.

9. Phœbe.

10. Wood pewee.

11. Least flycatcher.

12. Bluejay.

13. Bobolink (Ricebird).

14. Cowbird. 15. Red-winged black-

bird. 16. Meadowlark.

17. Baltimore oriole.‡ 18. Keel-tailed blackbird. 19. Purple finch.

20. Crossbill.

21. Goldfinch (Yellowbird).

22. Snowflake (Snow bunting).

23. White-throated sparrow.

24. Chipping sparrow.

25. Junco (Slate-colored snowbird).

26. Song sparrow.

27. Rose-breasted grosbeak.

28. Indigo bunting.

29. Scarlet tanager.

30. Waxwing (Cedar bird).‡

31. Red-eved vireo.

32. Black and white creeper.

33. Summer yellowbird.

34. Black-throated blue warbler.

35. Myrtle Warbler.

36. Chestnut-sided warbler

37. Blackburnian warbler.

38. Ovenbird.

39. Maryland yellowthroat.

40. Redstart.

41. Catbird.

42. Winter wren.

43. White-breasted nuthatch.

44. Chickadee (Blackcapped titmouse).

45. Golden-crowned kinglet.

46. Ruby-crowned king-

47. Wilson's thrush

48. Hermit thrush.

49. Robin. 50. Bluebird.

FLORENCE A. MERRIAM.

CHARLEY'S WONDERFUL JOURNEYS.

, JOURNEY VII.

HE two boys had been in bed a little while, and Charley was just dropping off, when he heard the door at the foot of the stairs open gently, and Fido call his name in a loud whisper.

He knew it was Fido's voice, and whispering to Bob to join him, the two boys slipped on their clothes, and crept silently down the stairs.

"It's a splendid night for a fox hunt," said Fido; a foot of snow on the ground, and a clear moonlight sky. Get out the rocking-horse and we'll have a glorious chase."

Charley opened the front door noiselessly; the two boys led out the horse, and the trio trotted merrily away across the home meadow to the maple grove.

* Arrangement given accords with the new Check List of the American Ornithologists' Union.

Comitted from Audubon Magazine but printed in the Boonville Herald, Boonville, New York, December 15, 1887.

† Ibid, December 22, 1887.

"Now, Bob," said Fido, "you hide in the maples and I'll come and hunt you up, and as soon as I'm on the scent I'll shout 'Tally-ho,' and then 'Let her go Gallagher.'"

Bob disappeared in the maples as he was told, Fido was soon on the track, and ere many minutes had passed, Charley heard the welcome "Tally-ho," dashed his heels into his steed, and galloped through the woods at wild speed.

As soon as he reached the open country, the dog and fox appeared in full view going like the wind, and Fido making the echoes ring again with the music of his voice.

Field after field was crossed, fence after fence negotiated in true sportsmanlike style, creeks cleared at a bound, but Fido could get no nearer to the fox, and Charley no nearer to Fido.

At last they came to some woods, and when Charley got through to the other side,

he found Fido running up and down trying in vain for the scent.

"We must try back," said the dog, "I've lost the scent."

They tried back until Fido picked up the scent, lost it and returned to it two or three times. At last he lifted up his voice, and cried, "Treed, by Jupiter; come along, Charley, here he is up a tree."

"You must be fox next time, Charley," said Bob, "or I won't come down."

"I don't mind," said Charley, "only I can't run on the snow without my snow-shoes."

"Well, there they are in the sleigh," said Bob, "and I'll help you put them on."

Charley looked round; he thought he had come on the rocking-horse, but was delighted to find that it was the horse and sleigh, and that his snowshoes were there, as Bob had said.

He had them out in a twinkling; Bob came down and helped him to put them on, and no sooner had he struck out for a run than he glided away like the wind.

Presently he heard the expected "Tally-ho," and increased his speed almost without effort. Trees and landmarks appeared to dash by him with railway speed, and gradually the baying of the dog and the "Tally-ho" of Bob grew fainter and fainter as he left them far behind.

After a time the baying of the dog ceased altogether, and Charley stopped to listen. He shouted, but there came no response. "I will go quietly," thought he, "and give them a chance to catch up."

Charley stepped along easily for some time, and had almost forgotten Fido and Bob, when he heard a sound behind him that for a moment made his heart stand still. It was the whoop of redskins following on his trail.

He stepped along again, not too fast, because he wanted to get a sight of them, and seeing a nice little oak sapling, he pulled it up by the roots as he dashed by. "This

will make a good club," said he, as he took out his knife and trimmed it a bit.

The Indians came nearer until Charley could see their dusky forms—quite a crowd of them—and away he went again with the speed of the wind, but they followed on, neither losing nor gaining ground, and yelling like furies.

Then Charley looked to his right and saw another lot of redskins running to cross his path; then he looked to his left and saw a third party. Right and left, as far ahead as he could see, there were redskins running to cut him off. Behind and on both sides they were closing on him, but there were none straight ahead, and Charley dashed on.

At last they were abreast of him on both sides, and Charley raised his club, and rolled them over like ninepins.

"Charley," cried the screech owl overhead, "bowl them over to right and left, but be careful not to let one fall across your path."

"They are only toy Indians," said Charley as he knocked them over by the score; but at that moment he heard a yell behind him that made his blood curdle. The redskins were close behind him, and another crowd closing in in front. He dashed forward, swung his club with more force than judgment and rolled a redskin across his path.

His snowshoe tripped on him, he fell forward against the crowd, knocking the foremost ones against the second row and these against the third row, and so on, and the next moment there were a hundred rolling in the snow; and while Charley was struggling to rise, his pursuers pounced on him with a yell.

On they came—old men, young men, pappooses and squaws—yelling, laughing, shouting and dancing for joy, and telling each other what a glorious run they had had.

They crowded round Charley, especially

the women and children, but the warriors drove them all back, and made them form a circle with Charley in the middle. It was a sad time for Charley.

"Now we have got him," said the chief, "the question is, what shall we do with him?"

which to choose if they had left it to him, but he had no choice in the matter, and he felt very miserable.

Just then one of the women stole up behind him without letting the chief see her, and gave Charley a pinch which made him cry out.



"CHARLEY," CRIED THE SCREECH OWL OVERHEAD, "BOWL THEM OVER TO RIGHT AND LEFT, BUT BE CAREFUL NOT TO LET ONE FALL ACROSS YOUR PATH."

"Oh, do let us have him, said the children; "we'll prick him, and touch him with burning sticks, and have such fun."

But the squaws wanted him that they might pinch him and enjoy the music of his voice when he cried out.

And the young men said that that was all nonsense, they wanted to set him up for a mark to shoot at with their bows and arrows.

And poor Charley wouldn't have known

At this all the women and children yelled with delight, and clamored to the chief to let them have him, and some of the women rushed in and tried to get him by force, and the young men pressed forward and struggled with the women, and there was an awful confusion and quarreling, every one speaking at once, which Charley thought very rude. Indeed, he was going to tell them so, when the chief grew impatient at the quarreling and said, "Here, I've had

enough of this nonsense, I'll soon put an end to your disputes."

And with that he took Charley by the hair and pulled his head back across his knee, and then with a long knife in the other hand prepared to cut his throat.

Charley saw the glittering blade and the cruel purpose in the chief's eye, he felt the point of the knife on his throat, and with one desperate struggle for life and liberty, struck out at the chief's face, and sprang up trembling and astonished—in bed.

"What did you hit me for?" said Bob.
"There, take that now," as he rushed on
the astonished Charley and struck him.

Charley sprang out of bed in an instant, and the two boys went at each other pell mell, and rolled over together on the floor, and made a racket that soon brought Charley's mother up to see what was the matter.

As she opened the door the boys jumped to their feet and stood glaring at each other with clenched fists.

"He hit me first," said Bob.

"I didn't," said Charley; "he hit me first. When I awoke from my dream, and sat up in bed, he came and hit me for nothing."

"It aint so," said Bob; "he wasn't asleep, he was only shamming. He had his head stretched back on the pillow, and I just put my finger on his throat, pretending to cut it, when he up and hit me a whack on the nose."

"But that was the chief trying to cut my throat with his knife, and I wanted to hit him," said Charley.

"Oh, what a lie," said Bob; "wherever do you expect to go to?"

But the mother pacified the boys as well as she could, and dressed Charley and told him he should tell his dream after breakfast,

"Well, I think this has gone far enough," said Charley's father when he heard it; "dreaming about Indians and squaws and getting his throat cut. Now that boy's got to take a dose of medicine. If he don't there's no knowing what he'll be dreaming next; you mark my words."

And so Charley saw the nasty black physic mixed, and made many wry mouths over it, but he had to take it.

"Sarve you right," whispered Bob. "You shouldn't have gone and said you thought I was an Injun."

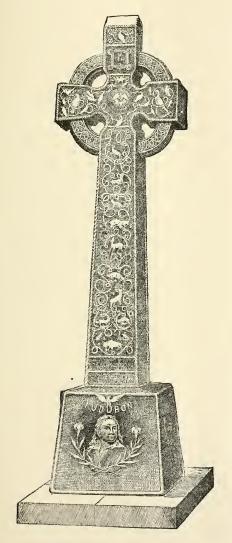
C. F. AMERY.

THE AUDUBON MONUMENT.

THE preliminary work of the committee appointed to take charge of the erection of a monument to the memory of John James Audubon has been completed. The various scientific societies in this country have been communicated with, and have expressed their readiness to take part in the work of raising funds. The several subcommittees have met and agreed on the design, an impression of which is here given for the information of our readers. The basic block with a medallion of the great naturalist is to be of granite, the shaft terminating in a Runic cross is a monolith to

be executed in North River blue stone. The ornamentation in our sketch is suggestive only of the general idea; it will consist for the most part of birds and animals with which Audubon's name is especially associated, and the selection and drawing of these has been committed to experts. The total cost is estimated at ten thousand dollars, and nothing now remains but to collect the money. The monument will be put in hand and the work progress as fast as funds flow in, and every effort made to prepare for unveiling the monument in the early fall of the year

The monument, designed to honor the memory of the dead naturalist, will reflect no less honor on the living who contribute to it. Scientific societies all over the coun-



PROPOSED MONUMENT TO AUDUBON.

try have displayed the utmost eagerness to participate in the undertaking; every one feels that it would be discreditable to stand aside; there is consequently no doubt of its being carried into effect; in fact the central committee has already the promise of such liberal support as to relieve them of all real anxiety on the subject.

And now for us comes the question, "Shall the Audubon Society be fairly represented on the published roll of the subscribers to the monument, or shall we leave the credit to others, and have it inferred that we are wanting in all sympathy for and appreciation of the great naturalist, whose name we have assumed for our society?"

Large subscriptions are not necessary. Audubon is a national name, a name that Americans are proud of, a name the mention of which awakens national sympathies, and there can be no doubt that thousands will be ready to put their hands in their pocket and do honor to his memory, and as the costs will not exceed ten or perhaps eleven thousand dollars, there is no occasion to call for liberal contributions. What we want is numerous contributions of small sums, that the roll of the subscribers' names, which it is proposed to unfold at the same time as the monument, may be found to be representative of all classes of the community and all sections of the country.

It was proposed at the last meeting of the general committee to prepare photographs of the monument, one of which should be presented to each subscriber, with the name and the amount of subscription written on it, as a lasting memorial of his or her connection with the erection of the monument.

The Audubon Society should be numerously represented on the Audubon subscription roll, and the *Forest and Stream* for the Society desires to head the list with a subscription of \$25.00.

Subscriptions from members of the Society may be sent to us direct, or through the Local Secretaries of the Audubon Society, and we take this opportunity to invite all the Local Secretaries of the Society to interest themselves to secure contributions to the fund.

TWO LITTLE CAPTIVES.

"R AIN, rain, rain. I wonder if it will ever stop," sighed Bertie at the window. "Say, grandpa, don't you think it might rain at night, so the boys could stay out of doors all day?"

"Well, I don't know, Bertie; the rain does a great deal of good, especially after a dry spell like the one we have had. But don't you think that some little boys might learn to be quiet on wet days, and stay in the house contentedly, without going about growling and making so much noise to wake grandma up?"

"But you see, grandpa, I haven't anything to do. I would be quiet if you would tell me a story."

Grandpa kindly put his paper down and lifted the little boy on to his knee.



"What shall it be about, Bert; fairies and beautiful princesses and giants?"

"Oh, no, they're girls' stories. You might put a giant in, though, and have lots of fighting."

"Very well," said his grandfather, "we'll have a giant and a battle and two captives; will that do?"

Bertie appeared satisfied, so the old gentleman began:

"Once upon a time, not very long ago, there lived a certain man who had a wife and two children. What shall their names be?"

"Rob and Dick," said the little boy.

"Oh, no; one was a girl."

"Well, Jenny, then. Rob and Jenny; go ahead."

"Rob and Jenny were very good children, and had very nice times together, although their father was quite poor; indeed, sometimes they had to go to bed hungry, and both their father and mother had to work very hard to get enough to eat, and came home at night very tired, but even if they did not have as nice things as richer children have, still they were very happy.

"There was only one thing which kept this little family from being perfectly happy, and that was this. Down at the foot of the hill was the castle of a cruel giant, who chased them every time he saw them and tried to catch them to eat. So the poor father and mother were always afraid that some day, while they were away, he would find their house and steal their children. They told the children never to wander far from home, but to play about their own house.

One day, while the father and mother were out, Rob heard an awful noise, and felt the ground shake so that it almost knocked down their little house. He ran to the door to see what was the matter, and what should he see but the wicked giant coming up the hill.

"'Ah ha!" he cried, as soon as he saw the little boy at the door, 'I've got you this time.'

"The poor little children ran back as far as they could into the house to get away, but he caught and held them fast in his great big hand, and roared with delight.

"'Oh, please let us go,' said Rob, 'please, please do,' while poor little Jenny

held on to her brother and cried out with fright.

"But the monster wouldn't listen; he just marched off with them down the hill, then he threw them into a bag and shook them together, laughing when he heard their piteous cries. After a while they came to his castle down in the dark valley. Here he pitched them into a deep prison, with iron bars, against which poor Rob threw himself, trying in vain to break them. But he only succeeded in bruising his poor arms and body and delighting his cruel captor. Think how the mother and father felt that night, when they returned tired after the hard work they had been doing that day to earn the supper they were carrying home, with, perhaps, a few dainties for the children. Imagine their feelings when they saw their pretty home ruined, the door broken down and the children gone. In vain they went about the woods, calling them, hoping to find them hiding on purpose to tease. It was no use, the children were gone, gone perhaps for ever. They ran down to the castle with wild cries, and begged its cruel master to give up their children, their beautiful children. But he threatened to shoot them, and in affright they ran away, never to go back to the little house that was home no longer.

"In the meantime Jenny and Rob sat huddled together in one corner of their prison, not knowing what was going to happen next, whether they would be seized, murdered and eaten by the giant, or whether they were doomed to a long life in captivity. Food was thrown into them through the bars, but they could not eat. Could you eat, Bertie, under the circumstances? I think not. They just let it lie there, and refused to touch it. And so they crouched there, hour after hour and day after day, giving each other what comfort they could. Jenny, who was not so strong as her brother, soon gave up, and grew sicker and weaker each day, until at last she just lay on the floor, moaning 'Mother, mother' all day long. Her brother would try to comfort her, and would talk to her of the day when they should escape from the prison and go home to their dear little cottage in the woods; but she would only shake her head sadly, and say, 'No, Rob, I shall never see mother again.'

"At last the time came when she was too weak to move. Her face, once so plump and rosy, grew pinched and sallow, and her eyes lost all their bright look. Poor Rob had never seen his sister look so before, and he felt very much afraid he was going to lose her. He tried his best, poor boy, to be cheerful for her sake, but it did no good; each day she wandered nearer and nearer to that dark river.

"Every day the wicked giant would come and look in at them, and sometimes he would take a long stick and poke them, trying to make them jump about, when they felt too sick to move. So at last poor little Jenny would scream and cry as soon as she heard his steps.

"One day the little girl was worse, and Rob did not know what to do. He begged her to speak to him, but she would not make a sound. At last he saw her lips move, and bending down, heard her murmur, 'Good bye.' In an agony of grief and despair he threw himself against the bars, those cruel bars that had cut him off from life and liberty. If it had not been for them, he and his sister might have been playing together as they used to. The restraint he had put upon himself for Jenny's sake gave way, and he cried until he was exhausted. At last he got up and went to his sister, hoping that she was not dead, but asleep. He crept up to her, and bending down, whispered her name softly. But the eyelids never stirred, they were shut for ever over the eyes that could never see again. With a low cry of anguish, he threw himself across Jenny's body, and so the brother and sister dropped together

into that sleep that knows no waking."

"Oh, no, grandpa, no," said the little boy, "don't make them die; make some brave knight come and rescue them and kill the cruel giant."

"Ah, Bertie, that I cannot do, for the story is a true one. What brave knight rescued the little birds you took from their nest last year?"

"Birds! nest!" The boy looks puzzled.

"Yes, child, yes; the young robins you

took last spring are the children of my story, and you who took them are the wicked giant. Not a very big one," the old man smiles, "but a monster in their eyes."

The little boy slips down from his grandfather's knee, and going to the window, looks out into the gathering gloom, trying to see in the twilight the vacant nest in the old oak tree in front of the house, and the two little graves placed side by side at its foot.

ETHELDRED B. BARRY.

HELPLESS PETS.

A WAY back in the half-forgotten past I was familiar with a poem written on a "Bullfinch Starved to Death in its Cage," and, as though the spirit of the bird were yet speaking to the jailer of the cruelty practiced, the concluding words ran thus: "If you had shown me less cruelty, I would be your prisoner still."

It is no unfrequent thing to see a lady shedding tears at the loss of a canary bird, either from an unknown cause or from the claws and teeth of a domestic cat. Now, being a friend to birds, I am an enemy to birds in cages.

"But," says Mamie, "the canary knows nothing about any other life than that in the cage. It is weak and helpless, and could not get its own living if set free." This is equivalent to saying that the race has been imprisoned so long that it has become weak, helpless and degenerate. may be a humane thing, in the minds of many, to take care of these little imbeciles and encourage their increase under captivity. There are persons who have time to attend to their wants and have fortitude enough to endure their shrill, rasping notes; but to those who have delighted in hearing real song birds in the open air, singing from trees and meadows, the metallic ear-piercing notes of a canary are excruciating.

I am reminded just here of what my friend

Julia was telling me last winter: "You know Mrs. Blank is so outspoken, indeed, she says bad words and don't care a cent whom she says them to, either. One day when she called and we were having a sociable old chat by the fire, my birds began to sing. You know they always do when people talk or sit down to a meal. Well, they all tuned up and sang like everything. She seemed much annoyed and put her hands to her ears, and all at once started up and rushed to the door, exclaiming, 'I thought I could have a talk with you, but these abominable little devils have set up their clash!' Was not that awful?"

"What was awful?"

"Why, such a speech as that!"

"Oh, yes; but not so awful as the provocation for it."

But notwithstanding the annoyance these pretty little creatures inflict on a sensitive nerve, I speak in their behalf and from pity for the suffering, and the condition of the majority of them. In the winter they are kept in close, over-heated "sitting rooms," where fumes from the kitchen and laundry and even tobacco load the air; often they are watched daily by a murderous cat, and must suffer untold agonies from instinctive fear, until, in many cases, the little palpitating heart is stilled forever, and the arch enemy licks the last drop of its life-blood

from his whiskers as he glances sideways at the empty cage, and purrs with satisfaction: "I have eaten the canary." And why not? the game was within his reach. It was his prey, and he has no conscience.

But it is in the summer that canaries and other caged birds suffer the most. They are baked in the sun as though it were their destiny to be murdered by sunstrokes. Think of it, ye mortals. A bird hung in a cage against the side of a house, perhaps painted white, or some trying color, under the rays of a fierce, blistering sun, from which the chickens and pigs seek the shade of leaves. Possibly, being moved by compassion, you call the attention of the owner to the facts in the case; she will tell you in

her wilfulness and ignorance that "birds like the sun."

Birds sing in the morning and evening in the open air, and in the thickest shade in midday, but most birds are mute and seek cool retreats where the rays of the burning sun cannot enter.

Poor little prisoner! Wild with agony beneath a pitiless sun! Scream on in your crazy appeals for mercy! Your mistress has gone shopping or visiting a neighbor, or is rattling away at a sewing machine, making ruffles and tucks. She tells people that she has a splendid singer, and tells the price she paid the fancier for you, but she knows little of the laws of life or the needs of your constitution, and does not want to learn.

HELEN V. AUSTIN.

BY ALBATROSS MAIL.

A SENSATIONAL story, which for romantic interest rivals any of Rider Haggards' conceptions, hinges on the following scrap of intelligence, scratched in French on a small piece of tin:

"Thirteen shipwrecked men took refuge upon the Crozet Islands on August 4th, 1887."

This tin was found on the beach at Freemantle, South Australia, on the 22d September last, attached to the neck of a dead albatross, and the story having been circulated in the papers, came to the notice of Governor Robinson, who sent a despatch to the English government, who in their turn instructed their ambassador at Paris to communicate the fact to the French government.

By that time the French papers were discussing the probable loss of the three-master Tamaris, owned by the firm of Bordes & Son, of Bordeaux, which left Bordeaux for New Caledonia in the spring of the year, and of which no news had been received in the interim. Her crew numbered thirteen men, thus tallying with the number which

had taken refuge on the Crozet Islands, and as these islands were on the line of the ship's course, and the Tamaris should by calculation have made them during July or August, the presumption is very strong that it is her crew, whose whereabouts has thus been made known.

Every ship sailing in southern seas is followed by albatrosses, which wheel round it on tireless wing, until some animal refuse thrown overboard tempts them to alight, but during the summer months these birds have a wide southern range; far to the southward of the track of any but whaling vessels, and the comparatively few which are seen by mariners, can be only a very small percentage of the whole. The bird with its message attached might have roamed the great southern watery waste for years, without following in the wake of any passing ship; and even had it immediately taken to following ships, the tag would certainly have attracted attention, but the odds against its being read were very great.

Sailors frequently take these birds with hook and line, label them with date of cap-

ture, name and position of ship, etc., and let them go; and a labeled bird might possibly be recaptured in the same way, but if it were too wary to take the hook, it would be only during a calm that a ship's officers would shoot a labeled bird with the object of reading the inscription. Under no other circumstances would the communication be considered of sufficient importance to justify the lowering of a boat to recover the body.

That the dead body of the bird should have been found on the South Australian beach a few weeks after the message was attached to it is little short of miraculous.

There is scarcely an instance on record of man finding the body of an albatross that had died a natural death. Wild birds always steal away to die in secret, and the albatross, being essentially a water bird, and almost utterly helpless on land, would certainly never go ashore to die. A sick albatross, incapable of maintaining itself on the wing, would alight on the water, on the surface of which it can rest with ease and comfort, and we may be sure that the messenger from the Crozet Islands found dead on the Freemantle beach, was either washed ashore, or had been wounded and fell suddenly dead while flying along the coast.

The Crozet Islands are a little group of four or five very small uninhabited islands away south of Madagascar, in fact far south of the usual track of vessels, and are the breeding grounds of albatrosses, penguins, and other sea fowl. As a consequence they afford an abundant supply of food of a sort. The crew of the sealer Strathmore lived a long time on one of these islands, subsisting chiefly on penguin flesh and eggs.

Efforts have been made to rescue the unfortunate castaways. The French Minister of Marine at once sent instructions to the commander of the naval division in the Indian Ocean, to despatch the transport Meurthe to the Crozet Islands without delay, and to take the unfortunate mariners

to the Island of Reunion for return to France by steamer. Her Britannic Majesty's ship Thalia, on its way from England to Australia, also has orders to touch at the Crozet Islands; so we may expect soon to hear of the rescue of the shipwrecked mariners, and to see the albatross allotted a niche in the Temple of Fame.

The Crozet Islands are only about two thousand miles from Australia, and as the albatross is capable of flying sixty miles an hour, and probably of sustaining its flight for twelve hours or more, the messenger might have done the distance in three days: but six weeks elapsed between the date of the despatch, and the discovery of the bird's body on the South Australian coast. In that interval he could have gone round by Cape Horn, and circumnavigated the globe in southern latitudes, visiting every whale boat that came within reach of his piercing eve, and all without painful effort. These birds rest on the surface of the water at night, and oftentimes for hours during the day, and many of them must be inevitably swallowed by sharks.

Since the above was in type, further information has been published to the effect that the French transport Meurthe had touched at the Crozet Islands, in compliance with instructions from the French Naval authorities, and that on the small island of Cochous they found traces of the missing crew, who had left a written statement to the effect that they had been some months on the island, and having two boats with them, would try to make Possession Island. eighty miles distant. The Meurthe called at that island without finding any traces of the crew. At one of the other islands of the group the Meurthe spoke some whalers who had been there some weeks, but they knew nothing of the shipwrecked crew, and for the present it is impossible to determine whether they were lost on the passage from island to island or picked up by some passing whaler.

I.—CORVUS, THE CROW.

H E is a black, unmusical bird, and in our land and generation has a worse reputation, perhaps, than he deserves. The Bible account of Noah's raven is very interesting, and that raven was a crow.

The Siamese have an old fable concerning the crow. Once, it declares, he was far handsomer than he now is. One unlucky day he chanced for the first time to meet a nok-junk; that is a peacock, one of the birds called sacred in mythology. Then Corvus felt envious of peacock's magnificent plumes, and he foolishly asked the proud peafowl if he might not be dressed as richly as himself. The peacock good-naturedly answered that it could easily be done, telling Corvus that he would cover him all over with silver and gold, as men gild and adorn wooden and other images of many kinds.

The ambitious crow gladly assented, and his grand cousin proceeded to smear his feathers with black pitch, which the peafowl said was necessary to make the gold and silver tinsel adhere to them.

After doing so much, the peacock must take a journey to procure the bright materials for "finishing" the crow elegantly. When he returned *Corvus* was feeding upon a dead animal, as was perfectly natural for him, but the sacred, refined, and splendid peacock was shocked and displeased, and so he declined to gild the feathers he had blackened. Thus all ravens which in natural history are crows, have, since that unknown time, inherited only black plumage, unless by a freak of nature one has white feathers, as a black cat mother may have white kittens.

The common crow of Europe was named *Corvus splendens* by naturalists. This grand title seems to agree with another legend, that asserts that all ravens or crows were by nature purely white, and that they lost their fair beauty in consequence of their

meddlesome curiosity; a quality dangerous for any of us to indulge!

In early times among the Greeks and Romans, the children of the wealthy had many kinds of birds for pets. The crow or raven was one of their favorites.

In mythology (mythical religion) there was a raven called the Bird of Saturn, who brought many calamities to the earth; and so, in time, the poets sang dolefully of these dark birds. A poet of our own land, who died young, wrote a very musical and celebrated poem entitled "The Raven."

In the Norseland fables, two crows are representatives of Mind and Memory. They are named *Hugin* and *Munnin*.

Memory stood on the shoulders of Odin, a mighty god and warrior, and in those countries (Norway and Sweden) the crow or raven has always been regarded as a messenger of the King.

Besides the legend I have related, the people of Siam believe that a crow comes with news. When they hear him caw, the wise ones go into their houses and take a lump of boiled rice, colored red, yellow, blue, or green, which they keep in a basket, and throw it upon the roof. If the cawing bird alights to eat of it, then the master of that house supposes that the crow's tidings are for himself. But he never learns what the message is! He guesses and wonders about it till he is tired. A harmless kind of superstition that may be called.

It is true that ravens will carry off bright objects for which they have no use, such as jewelry and small silver articles. Not very long ago a tame raven allowed out of a cage, in Wisconsin, flew down from a branch and grasped in his bill a finger-ring, laid on an outside bench by a woman. He flew far away with the stolen ring, which was never recovered, although *Corvus* returned to his owner, who finally paid for it.

EMILY THACHER BENNETT.

THE AUDUBON NOTE BOOK.

MEMBERSHIP RETURNS.

THE registered membership of the Society on Feb. 29, 1888, was 44,308, showing an increase of 625 members during the month, drawn from the following sources:

New York	166	Michigan	4
Massachusetts	48	District of Columbia	4
New Hampshire	13	Minnesota	8
New Jersey	40	North Carolina	36
Maine	38	Indiana	17
Connecticut	4	Nebraska	6
Pennsylvania	27	Wisconsin	4
Maryland	3	Tennessee	5
Kentucky	38	Georgia	I
Kansas	10	Florida	1
Iowa	39	West Virginia	21
Illinois	21	Canada	3
Missouri	53	Bermuda	I
Ohio	13	Mexico	I
			625

C. F. AMERY, General Secretary.

SAVING THE TREE.

Editor Audubon Magazine:

One afternoon, about the middle of May, 1886, while sitting at my desk, I chanced to look out of my study window, and saw a Baltimore oriole (Icterus galbula) hopping from branch to branch of an ash-leaved maple tree. He was nipping off the leaves and the ends of the new and tender branches and dropping them upon the ground. My first thought was that he was doing great damage to the tree. In my boyhood's days I would have thrown a stone at him. A moment's reflection, however, convinced me that Baltimore would not so disgrace his lordly colors. I laid down my pen and went out to investigate. I found that in every case where a leaf or a twig had been cut off, it was done to get at a destroying larva, and that the bird was a faithful surgeon using his instruments with unerring skill to save the life of the tree. From that time my admiration for the winged Lord Baltimore has steadily increased. WM. H. TIBBALS.

PARK COLLEGE, 1888.

A CROSSBILL IN MID-OCEAN.

Editor Audubon Magazine:

I received a few weeks ago a copy of your magazine and took pleasure in it. I notice it speaks of the high and extended flight of the crossbills. This recalls an incident which interested me and may interest your readers. A number of years ago, I think it was the summer of 1870, I was coming across the Atlantic in a sailing vessel—the barque Bounding Billow. One day we were about in a line from New-

foundland and the Azores, Newfoundland being about 600 miles distant, the Azores somewhat nearer, when a crossbill came on board the vessel. The prevailing winds had been northwesterly, and this in connection with the sort of bird it was led us to believe that it had come from Newfoundland. It must have had a long flight in any case, and while it might have rested on the way, it could scarcely have had any food. As we tried to catch it it flew short flights on the vessel, but would not leave, and we at last caught it by the help, if I remember right, of the food placed near a caged goldfinch we had on board. At any rate it was caught and caged. It did not seem wild but very hungry. It was a great pleasure to see it eat and drink and rest. We brought it to New York and there it was stolen from the vessel.

WALLACE E. MATHER.

Paris, Oneida County, N. Y.

THE SPARROW CORRESPONDENCE.

GENERAL SPINNER'S reprobation of the English sparrow in his correspondence with Miss Lydia L. A. Very, has called forth a host of protests which we would gladly publish if they tended in any way to settle the question at issue, but while it appears only just to Miss Very to allow her an opportunity of foiling the General's thrusts, we should only tire our readers if we devoted our columns exclusively to the discussion of this inexhaustible subject.

Whether the English sparrow is or is not a desirable acquisition is a question about which there will always be a difference of opinion, because it will never be possible to determine the extent to which he replaces American birds, but the friends of the sparrow may listen to all the tirades against him, and to all suggestion of measures for his destruction with the most perfect complacency in the calm assurance that the resources of the American people are inadequate to his extermination. The English sparrow has come to stay. Following is Miss Very's letter:

Gen. F. E. Spinner:

Dear Sir—I thank you for your interesting and amusing letter. You are mistaken in your supposition that I am one of those ladies who carry dainties, flowers and misdirected sympathy to red-handed murderers and other criminals in prison. I do not belong to the roast turkey and plum pudding brigade, but my sympathies are wholly with their victims. I think punishment, to be effectual, should be punishment. And now about the sparrow. You must allow me to speak plainly. I think you have been guilty of a great cruelty in inciting boys to kill them.

I know the boy nature thoroughly and know if they are permitted to kill one bird they will kill any or all, even kill the sparrow when she has little ones and leave them to starve. I do not think even you would encourage this. You say the sparrow is strictly granivourous. This is incorrect, as thousands who have watched it can testify. It was not long ago that a small crowd of people in our street were watching a little sparrow trying to kill a large black beetle. The sparrow is not considered a pest in Europe. Had that character been given him, he never would have been brought here. The skunk, which you mention in your list of nuisances, has been killed without mercy, but a writer in the AUDUBON MAGA-ZINE testifies that he clears his field of potato bugs! Give him credit for that. If we do not see the use of created things I ascribe it to our ignorance, and do not say that the all-wise Creator has made a nuisance. You say that some States have passed laws making it a penal offense to harbor the sparrow. It was not many years ago that there was a law forbidding any one to harbor or feed a fellow being if his skin were colored. There is a higher law overruling man's in regard to men and birds. You say man is the chief brute of creation, but then woman is his mother. True, but then he takes after his father. You say the sparrow is dirty and feeds on horse-droppings. Your favorite robin, when she has her little brood, feeds on the undigested worms that pass through the little ones. I do not consider anything dirty or unclean in the brute creation, but admire the wisdom of the Creator that has planned it so that one creature can be supported on the refuse of another! The little sparrow has made the winter pleasant to old and young, and invalids (who have so few pleasures), with his merry twitterings and pretty ways; he is at work winter as well as summer. He eats the lice around the fruit and flower buds (some ignorantly say he is biting off the buds), the elm trees look far better since he has been at work upon them. He is not to blame that he came to this country. Blame those who brought him here if any censure is needed. But let not man be more cruel than old Winter, who, when the little things succumb to the cold, puts them to sleep kindly and lays a white quilt gently over the poor, little frozen bodies. If ever I go forth to fight and want an opponent, it will not be the poor little defenseless sparrow. Yours truly,

LYDIA L. A. VERY.

PRESERVATION OF THE YELLOWSTONE PARK,—A movement has been set on foot by the Forest and Stream Publishing Company to influence Congress by petitions in support of Senator Vest's bill now before the Senate providing for the proper conserva-

tion and control of the Yellowstone National Park. Every one has heard of this fairy region, which contains within its area a collection of natural wonders unequalled in the world, and which is now the last retreat of the little remnant of our buffalo, elk, and other great game; and every one with a spark of patriotic sentiment must naturally wish to preserve this remarkable region to the American people for all time. Senator Vest's bill makes all necessary provision for the preservation of this region, but its passage was opposed last session by the representatives of a few individuals, who want to run a railway through the Park. The effect of this might be to erect drinking saloons, inclose geysers, encourage poaching on the last of the big game, and generally to treat the Park as their own property for conversion into dollars and dimes by levying taxes on all visitors. This is a job which the whole American people is interested in averting, and it can be averted if the Legislature at Washington be made aware that the people are interesting themselves in the subject, and we trust our readers will do their share to contribute to so desirable an end. Forms of petitions in duplicate will be mailed free on application to Forest and Stream Publishing Co., New York, N. Y.

A THOUGHTFUL GREAT LADY.—The Empress of Brazil is one of the great ladies who will not count-enance the wearing of birds' feathers or bodies about their persons. Though Brazil is noted for its birds of brilliant plumage the Empress never allows their feathers to be used for any part of her dress. Since she has been at Cannes she has assured a visitor that, "much as she admires the feathers of the magnificent birds of Brazil, she only likes them on their bodies."

CRUELTY PERSONIFIED.—A woman lately returned from Europe brought a reception gown that must have had 200 little brown birds, fastening a rose-colored crepe upon a skirt of white silk. A circlet of the little feathered creatures is for the head. "I believe it would be a good dress for a character to wear at a costume ball," said its owner; "only I wouldn't know what to call it. What would you say for a name?" "Cruelty to animals," replied the friend.

To Color Canaries Red. — Editor Audubon Magazine: Perhaps some of your young readers who keep canaries might like to know how to color the feathers red, and orange. It is very simple. When the birds begin to moult keep them supplied with plenty of red peppers, as much as they will eat, in addition to their regular food. I have a canary who is almost pink. From one of your members.—Montie Schuyler, Jr.

EMINENT PEOPLE ON BIRD PROTECTION.

OAK KNOLL, Danvers, Mass., and mo., 20, 1886.

Editor Forest and Stream:

I heartily approve of the proposed Audubon Society. We are in a way to destroy both our forests and our birds. A society for the preservation of the latter has long been needed, and I hope it is not too late for the accomplishment of its objects.

I could almost wish that the shooters of the birds, the taxidermists who prepare their skins, and the fashionable wearers of their feathers might share the penalty which was visited upon the Ancient Mariner who shot the Albatross. Thy friend,

JOHN G. WHITTIER.

BROOKLYN, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I am heartily in sympathy with your purposes for the protection of birds, and should be glad to contribute any influence that I can to that end.

If there were no purchasers there would be no demand, and no reason for slaughtering these winged gems. But as only women create a demand, it rests upon them to stay this wanton destruction. I am sure that it is only necessary to bring before American women the cruelty of this "slaughter of the innocents" that fashion is carrying on, to secure a renunciation of this ornament and the salvation of birds.

On this subject the kind feelings, the taste, and æsthetic sympathy of the whole community are on your side, and if you persevere you will surely win.

HENRY WARD BEECHER.

CORNWALL-ON-HUDSON, N. Y., Feb. 22, 1886.

Editor Forest and Stream:

You have indeed my hearty sympathy in every effort to prevent the slaughter of my innocent little neighbors and friends, the birds. In the destruction of forests and birds, the people of this land are inviting very great evils and inflicting wrongs on posterity which scarcely can be measured. The press should render it impossibe for women to sin thoughtlessly and ignorantly in demanding little birds for their adornment. The evil should be brought home so fully to the knowledge of all, that the continued wearing of our useful little birds should become the badge and indication of a callous, vulgar nature. You are doing a humane and patriotic work in exciting public aversion to one of the most cruel and stupid wrongs of the age.

Respectfully yours,

EDWARD P. ROE.

West Park, N. Y., Feb. 20, 1886. Editor Forest and Stream:

I scarcely need assure you that your undertaking to form a society for the protection of our wild birds against the ravages of the milliners and the sham scientific collectors has my warmest sympathy and approval. It is a barbarous taste which prompts our women and girls to appear upon the street with their head gear adorned with the scalps of our songsters; and it is mere vanity and affectation which prompts so many persons to make up cabinets of the nests and eggs of the same. The destruction of our birds from their natural enemies is immense, and this craze of the collectors, and folly of the milliners and their customers in addition, threatens their serious diminution.

I hope you may succeed in creating so strong a public sentiment upon the subject that the collectors of skins and eggs for the unworthy purposes of fashion or to indulge the vanity of pseudo-naturalists may suddenly find their occupation gone.

Please add my name to the list of the members of the AUDUBON SOCIETY. Very sincerely,

John Burroughs.

160 W. 59TH STREET, (NEW YORK, Feb. 20, 1886. (

Editor Forest and Stream:

No one who will take the trouble to give the matter a few moments' serious consideration can be in doubt, I think, as to the wisdom of organizing the AUDUBON SOCIETY, and I am thankful that such a step is contemplated. There is an element of savagery in the use of birds for personal decoration, which is in grotesque contrast with our boasts of civilization. But even the savage stops short, as a rule, with the feathers. It is only Christian people who think it worth while to butcher a whole bird to adorn their head gear. I am sure, however, that this is largely from that unreflecting habit which is a leading vice in people who follow the fashions. But it is a vice; as Hood sang, when he wrote—

For evil is wrought By want of thought As well as by want of heart.

If the AUDUBON SOCIETY can teach men, and especially women, to think on this subject, half of the battle will have been won. HENRY C. POTTER.

Andover, Mass., Feb. 21, 1886.

Editor Forest and Stream:

I am in earnest and indignant sympathy with the motive of any society organized to prevent the murder of birds for decorative purposes.

E. S. Phelps.





THE NIGHT HERON.

(Nycticorax nycticorax nævius (Bodo.))

THE AUDUBON MAGAZINE.

Vol. II.

MAY, 1888.

No. 4.

THE NIGHT HERON.

THE herons are a group of birds well represented in America. They are peculiar and but little known to the casual observer, so that before turning our attention to the subject of this sketch a few words may be said about the family as a whole.

The herons, as is well known, are characterized by long legs, necks and bills, are water-loving birds, living about streams and lakes, from which they draw their subsistence. They are birds of rather sluggish habit, slow-moving and with a slow but powerful flight. On account of their quiet ways, and the fact that their life is spent in out-of-the-way places, they are seldom seen except by ornithologists and gunners. Most of the time they spend standing motionless by a stream on the watch for fish, frogs or lizards, and when anything living ventures within their reach it is almost sure to be transfixed by the sharp bill which the ready bird darts out like lightning to seize its

An interesting account of the habits of some of our South American species of herons is given by Mr. W. H. Hudson, and as the herons quite closely resemble one another in their mode of life, what he says about them will apply very well to those which we know. He says:

"The heron has but one attitude—motionless watchfulness; so that, when not actually on the wing, or taking the few desul-

tory steps it occasionally ventures on, and in whatever situation it may be placed, the level ground, the summit of a tree, or in confinement, it is seen drawn up, motionless, and apparently apathetic. But when we remember that this is the bird's attitude during many hours of the night and day, when it stands still as a reed in the water; that in such a posture it sees every shy, swift creature that glances by it, and darts its weapon with unerring aim and lightning rapidity, and with such force that I have seen one drive its beak quite through the body of a fish very much too large for the bird to swallow, and cased in bony armor, it is impossible not to think that it is observant and keenly sensible of everything going on around it."

The bitterns and more sluggish of the herons, when driven from their haunts, fly only short distances of eighty or a hundred yards, and again alight among the rushes, "whence" Mr. Hudson, describing further the habits of one South American species, says "it is almost impossible to drive or discover them;" and this he found after careful investigation is due to the fact that the bird, grasping a reed by its feet and pressing against it with its tail, lays its breast bone, neck and beak along it in one straight line, which it maintains so motionless that one may pass and repass it within a few inches without recognizing it; the most remarkable part of the performance being that the bird, although the hunter may go round it and would readily detect it by the variegated feathers of the back, always keeps the sharp edge of its rush-like breast toward him.

The herons are especially characterized by their tireless watchfulness for their prey and for their insatiable voracity. "In other birds," says Mr. W. H. Hudson above quoted, "repletion is invariably followed by a period of listless inactivity, but the heron digests his food so rapidly that however much he devours he is always ready to gorge again," but however abundant may be his food supply, the heron makes no fat, and very little flesh, so that when on the wing he has no superabundant weight to carry.

Another very remarkable characteristic of the herons is the presence of what are called "powder down tracts," patches of dense clammy, yellowish down on their breasts. Of these the true herons have three, and some naturalists have attributed to them the freedom of these birds from lice and vermin, but it is an old popular belief that these patches glow with phosphorescent brilliance in the dark, furnishing the heron with a convenient lantern for his nocturnal fishing excursions.

The Night Heron is widely distributed through the United States, but seems to be more abundant near the seacoast than on inland streams. In the Southern States it may be seen at all seasons of the year, but in New England it is known only as a summer resident. We have found it common in California, both in winter and summer, but it is rarely seen in the interior, though Dr. Coues has reported it from the Red River of the North in Dakota. northward migrations carry it a little beyond the United States. Although usually moving south at the approach of cold weather, it seems probable that some individuals pass the winter at least as far north as New York city, for we know of two having been killed in that neighborhood in the month of January. The late Dr. Brown succeeded in keeping one in Boston until the middle of December.

The Night Heron is to a great extent nocturnal in its habits, and besides this it is rather a shy and wary bird. It is therefore not often seen, except by those who visit its roosting or breeding grounds. These are usually in swampy or near large bodies of water, and many nests are usually found together, these birds breeding in colonies which often number several hundred individuals. The nests are sometimes placed high upon tall trees, are rough flat platforms of twigs and are almost altogether without lining. Each nest usually contains four pale green eggs, which measure about two inches in length by one and a half in breadth. The young leave the nest in a couple of weeks after they are hatched and scramble about the branches, to which they cling firmly.

The voice of the Night Heron is rough and hoarse, and from this it has received in many parts of the country the local name *Quawk*. Often at night this call may be heard falling from the air above, and the chirping, barking sound tells that a Night Heron is flying over.

The food of this bird consists of fishes, frogs, tadpoles, newts and various insects, and no doubt it eats mice and snakes, if the opportunity occurs.

Like all the herons, this species is ready to fight if forced to do so, and can inflict severe wounds with beak and claws if incautiously seized. The Night Herons have favorite roosting places to which they repair when they have satisfied their appetite, to rest until the calls of hunger urge them again to start out on their hunting expeditions along the marshes where they feed. One such place we remember in New England, a rocky island rising above the salt marsh which surrounds it and covered with a growth of tall trees. If you walk by this on a summer day you will startle hundreds

of quawks from their perches on the trees, and with hoarse calls of alarm they will wing their way out over the marshy flats of the broad river which lies on one side of their roost. Here among the reeds and tall grass they find the food which best suits them. If you conceal yourself in the underbrush just before the tide becomes high, you will see the birds one by one leave the marsh and come back to the trees, there to sit dreaming until they get hungry again, and the water has fallen low enough for them to feed.

The Night Heron is about two feet in length, measured from the tip of his bill to the end of his tail, and the spread of his wings is more than three and a half feet. The old birds have the bill black, and the eyelids and naked skin in front of the eyes

yellow. The iris is red, the feet yellow. The feathers on top of the head, the fore part of the back and the long feathers of the shoulders are greenish black. The forehead, front of neck, breast and belly are white or cream color. The sides of the neck are pale lilac, and the wings, lower part of the back and tail, pale gravish blue. From the back of the head several long slender white feathers grow backward, as seen in the plate, but these are lost after the breeding season, and do not grow again until the latter part of the next winter. The young birds are quite different in appearance from the old ones. They are plain brownish birds, the edges of each feather being paler than the center. The feathers of the back and wings have each a long spot of brownish white at the end.

BIRDS AT THE BATH.

PORT HARRISON PRAIRIE was very dry during July and August of the past year, and springs of water are very scarce. Having a number of colonies of bees in the orchard I furnished them water fresh every day. Our poultry also liking the shade were furnished with drinking vessels filled daily. The birds could not bear the scorching heat, and sought the shade of the apple trees in large numbers. found that they too needed water. They did not molest the bee trough, but preferred to sip where the poultry drank, if the hens would allow them. I placed shallow dishes where the chicks could not trouble the birds, and the latter required more water than four dozen fowls. A catbird would hop on the edge of the dish, drink all it wanted, then plunge in for a large bath, throwing the water in every direction, hop out, shake itself, and then jump in again, to try to use up all the water. By a little observation I found that one cathird that

was sitting on a nest of eggs, enjoyed a bath twice a day, coming to the dish with mouth open. The robins, thrushes, mockingbirds, yellowhammers, jays, orioles, cedar birds, redbirds and chippies found the dishes a great convenience and came regularly to quench their thirst and cool their breasts.

One hot afternoon a yellowhammer came screaming to the dish for a drink, next two cedar birds, then a mockingbird, and then came a brown thrush which when nearing the dish opened his long bill (and put back his ears if he could) in a spiteful way at one of the cedar birds, causing him to take a seat in the gallery on an overhanging apple tree limb. I doubt if the eves of man ever beheld before the sight of four varieties of wild birds, drinking out of a dish six inches wide and sixteen inches long. The dishes were shallow, none deeper than two inches. The yellowhammer seemed to be the clumsiest bather, but took great pains to straighten his plumage afterward.

UNCLE TONY.



HENRY BERGH.

In the obituary list of the month of March is registered the name of Henry Bergh, the founder and president of the Society for the Prevention of Cruelty to Animals; a man who, although he achieved no distinction in arms or art or science, was nevertheless the acknowledged peer of the nation's greatest, in any and every department of thought or action.

Henry Bergh was essentially a man of his age, a man who has impressed himself ineffaceably upon his generation, and that too for great good; a man who has moulded the sentiments, and thereby so modified the character of the nation that his life and labors and personal characteristics are of never failing national interest.

Henry Bergh, as would be inferred from

his name, is of German descent. His grandfather, a ship carpenter by trade, came over with his young wife from the Rhineland in the early part of the eighteenth century, and settled at Staatsburg-on-the-Hudson, where he established a shipyard, which proved a successful industry. In this he was succeeded by his eldest son, Christian, who married Miss Elizabeth Ivers, the daughter of a Connecticut gentleman, by whom he had several children, one of whom, born in 1823, is the subject of our sketch. The shipbuilding business, transferred to Brooklyn, came by inheritance to him and his brother Edwin, but Henry sold out his share and commenced a course of study at Columbia College, reading for the law, but never finishing his course. He had

liberal means and appears to have been seduced away from this dry study of the law by a desire to travel. At any rate, on resigning his studies he embarked on an European tour which extended over five years. While still young he married Miss Taylor, a young lady of English parents, and set out with her on a long course of travels over Europe and the East, until wanting rest, they settled for a time in the beautiful Rhineland, the ancient home of his family, where he employed his leisure time in literary pursuits with more or less success. One of his productions, "Love's Alternations," was very favorably received, but he aimed at dramatizing his conceptions, and wrote a number of plays which were condemned by unappreciative stage managers.

Returning to New York in 1861 he accepted the appointment of Secretary of Legation at St. Petersburg under Cassius M. Clay, and from this he was promoted to the post of Vice-Consul, but he sought relief from his official duties in 1864, and returned to America animated by an indomitable determination to establish a society for the prevention of cruelty to animals on the model of that already recently established in England under the auspices of the Earl of Harrowby, whose acquaintance he made in the interval between the resignation of his official appointment and his return to America. was forty-one years old when he entered upon the life work which has won him a nation's respect and admiration.

The first year after his return to his native land was spent in maturing his plans for the establishment of a society for the prevention of cruelty to animals, and for the suppression of the "cruelists," as he called those who ill-treated the dumb beasts, calling attention to the subject by numerous lectures. The plea for justice and mercy to animals was so novel, among a people whose code of morality embodied the provision "that every man had a right to do

as he liked with his own," that Henry Bergh was opposed as a crank and fanatic, and his personal peculiarities and characteristics subjected to ridicule. Henry Bergh was essentially a man of his age, his humanitarian sentiments were the product of nineteenth century civilization and softening of manners, and in giving expression to them he but formulated ideas. which called forth a sympathetic response from thousands in whose breasts similar ideas were already rudely shaping themselves. He accordingly found numerous supporters, and a society was formed, which by his indomitable energy and personal influence at Albany he succeeded in getting incorporated on the 10th of April, 1866.

He and his wife immediately conveyed valuable property to the society; others came forward with contributions, the best public opinion was enlisted in behalf of the reformers, branch societies were rapidly established in other States and Territories, and the movement led by one man soon proved itself a complete success.

Louis Bonard, a Parisian, bequeathed a hundred and fifty thousand dollars to the parent society, which has never been in need of funds.

The society soon made its power felt. Laws were enacted making cruelty to animals of all classes an offense, and Henry Bergh, who had been made president of the society, was empowered by the Attorney-General of the State, and District-Attorney of the city, to represent them in all cases of this class. The society had the administration of the law in its own hands, and it soon began to be whispered among the hackmen and drivers of all sorts that the eccentric looking Henry Bergh was "the law and the gospel also in the city of New York."

Indomitable courage was necessary to the enforcement of the laws prohibiting cock fighting, rat baiting, dog fighting and other brutal sports, but Henry Bergh enforced them fearlessly, never shrinking from encounters involving personal danger in pursuit of his self-imposed duty.

Since its organization the society has prosecuted over ten thousand cases, and the law is now so generally known that little attempt is made to evade it openly. Public sentiment on the subject has been so thoroughly aroused during the past twenty-five years, that it requires some stretch of the imagination to realize the vast change that has been wrought by the movement inaugurated by the subject of our sketch.

When Henry Bergh began his crusade there was not a State in the Union which had any law making cruelty to animals an offense. Now all, or nearly all, have statutes bearing upon the subject. It may be urged, perhaps, with some show of reason, that poor men and women too are compelled to toil while they are sick and sore, and that a true humanitarianism would have begun with them, rather than with the beasts, but as a simple matter of fact the greater difficulty of fixing the responsibility in the case of suffering humanity is the chief obstacle in the way of providing remedial means, and perhaps the first best practical step in the direction of redress of human wrongs is the rigid enforcement of the law against injustice to the brute creation.

Societies for the prevention of cruelty to children are the natural and inevitable outcome of Henry Bergh's reform movement, for no community that made it an offense to ill-treat the dumb beasts, would long tolerate the pleas of cruel parents that they have the right to do as they like with their own children.

As might be inferred of a man who had worked out so distinctive a career for himself, Henry Bergh's personal appearance was decidedly characteristic. The well rounded dome of his head rose above a face of extreme length, expressive of an unusual admixture of lugubriousness, mirth,

gentleness and firmness, but although he was sometimes irreverently styled "the knight of the rueful countenance," his face was both a pleasant and an intellectual one; he had a tall slight figure, and was fastidious in the matter of dress, but the characteristic individuality of his person appeared to extend to his dress also.

He died at his residence, No. 429 Fifth avenue, on the morning of the 12th of March. He had been suffering for a long time from chronic bronchitis and enlargement of the heart, but although he had been out of the house only a week before his death, the event had been long anticipated. He left no children, but his nephew and namesake Henry, the son of his brother Edwin, has long been associated with him in the conduct of the affairs of the Society, and by the terms of his will it appears that he looked forward with hope that his nephew would succeed him as its president.

The post is no longer one of unusual difficulty, nor one calling for exceptional powers. The humanitarian sentiment of the age has been aroused into activity and organized, and with the whole weight of the law on the side of the organization, its power is practically despotic. were very different in 1866, when Henry Bergh entered the lists single handed against all the combined ruffianism of the country, and called on all good men to rally to his support. Purity of motive, devotion to his sense of right and duty, indomitable energy, courage, perseverance, tact, persuasive eloquence, all these were eminently characteristics of Henry Bergh. In a word he was a leader of men, a man who impressed himself forcibly upon his generation, who exerted a marked influence upon its sentiments and conduct, a man of whom in fact it may justly be said that he has made the conditions of life for man and beast more tolerable; that the world, and especially his own country, is the better for his having lived.

To us who dwell in cities, the hints that nature gives of herself are so faint and few that it scarcely occurs to us to try and make a connected story of them. We walk between our high walls day after day, unheeding the weeds that grow for us in the cracks of the pavement, oblivious of the fact that through the slit between the housetops we can see the stars come out each night, and perfectly unconscious of those go-betweens of flowers and stars, the song birds. Many a time have they looked down from the tree tops on the corpses of their cousins adorning the hats of one-half the passing women, and heard the other half murmur indignantly at the barbarous custom, and vaguely wonder how those same dead birds would look alive. bird protectors," say they, "would so gladly know our friends, but how can we? There are no birds here in the city but the pigeons and English sparrows."

Are there not? We continue to walk unheeding, till some day there flits before our astonished eyes a stray woodpecker, who shows us for five delightful minutes his scarlet head, the brilliant black and white of his plumage; you hear his energetic hammering on the elm where he has lighted, you see him walk around its stem as though he owned it; a second later he is gone, and "all creation widens in your view." This is interesting. If there is one bird here, there may be more; if the rest are as handsome as this one, they are worth seeing, and straightway you begin to look for them. You strain your eyes among the dingy trees, to be rewarded sometimes by a glimpse of the warbling vireo; you extend your walks to the suburbs, where in the open space before the houses, you may catch sight of whole troops of jolly robins, hopping, running, gamboling on the grass plots. At first you probably know not so much as their name, but you begin to realize that there is more to be seen here than you had thought. Accordingly you hunt out an old field-glass from your uncle's army trunk, or you take an opera-glass, or better yet, you take just your own eyes, with the resolve to use them better than ever before, and you begin to make morning excursions—the sooner after sunrise, the better.

When you have done this twice, you are an enthusiast. You come in to breakfast radiant, in raptures, having heard the jubilant morning song of the robin, having found a bluebird's nest in a decaying post of the band pavillion in the park, or having met your first waxwing which you recognized at sight from the description in the AUDUBON, and with which you are hopelessly in love. This, at least, was very much the way in which I began to observe. There is probably no one in the United States who knew so little about birds.

For years the bluejays had been ughting in an apotheosis of blue and white upon the clothes-poles in the back yard; for years the blackbirds had built and paired in the steeple opposite; the pine grosbeak on its southern journey had lit in the maple outside my window, and the purple martins sat in rows upon the telegraph wires, yet I did not even know of their existence. It was the sight of a family of robins that, late one August, reminded me of other days and other scenes, in which I had known a lover of birds, and thought to myself "Why should not I too have friends among the birds?"

It would take a book to tell all that I learned in the next year, and how I learned it. You know how I began, but before long the city streets set too narrow bounds to my explorations; the birds, though charming, were too few to satisfy my new-born zeal for knowledge; it was unpleasant to use a field-glass where there were more spectators than birds, and impossible to

traverse a crowded street with one's eyes leveled at the third story windows. In fine, I longed for a wider field.

But the field was by no means easy to find. The suburbs of a city are neither agreeable nor safe for a solitary wanderer, whose eccentric attitudes, whose field-glass, whose gaze intent on space, and whose rapturous exclamations are calculated to make her anywhere an object of attention. She must have a place not too populous to disturb her pursuits, nor too lonely to afford her protection; it must be sylvan for the birds and urban for herself; it must abound in forests and policemen; it must be near enough to the city for frequent visits, vet not so near as to be unvisited by the shyest dwellers in the woods; it must be safe, secluded, convenient, frequented and rural.

And a place was found which met all these requirements—the cemetery. It lay just on the borders of the city, an inclosure of fifty or sixty acres of rolling ground, the greater part kept like a garden, with long flowerbeds among its clumps of beech and evergreen; in its neglected hollows, crowded with fern and wild sunflower, the bluebirds and goldfinches chased each other, while from the alder thickets on the hillside, song sparrows chorused all the afternoon. the sunny uplands, flocks of the goldenwinged woodpecker-the pigeon woodpecker, with its dove-like eyes-waded through the warm grass; a few acres of wild forest land made a covert of oaks and beeches for a multitude of warblers, and for the rest the bird was hard to suit who could find no place to his mind either among the hemlocks, tangled inextricably with woodbine, or where the graveled walks ran through trim rows of pear trees, or the bittersweet ran wild over the crumbling granite basin of the fountain.

Among the graves I did not wander much. It was from behind a marble head stone in the spring, that I watched with breathless interest the nest-building of a pair of brown thrashers, in the lower branches of an arbor vitæ, and it was on the point of some white shaft that the robin and the bluejay sat, with conscious pride, to display their charms. But it was not while they posed that one learned to know them best. Down in some of the many valleys where the meadowlarks rose from the long grass, or a hundred yards beyond, where the redstart built among the alders, and the ovenbird and the Maryland yellowthroat tripped and flew; or the hermit thrush in the black depths of a spruce, sang out at sunset—these were the spots where one learned without a book, and carried back to town that sense of relationsan instructive sense of the fitness of time and place—that makes one recognize at a glance the difference between the birds which float and the birds which flutter, the sprightliness of one family, the elegance of another, the vagabond boldness of a third. This bird which steps about with dignity under you solitary apple tree at the "townhouse," has nothing in common with the other which rustles through its branches and is gone before you can do more than recognize the general roundness, restlessness and kaleidoscopic coloring of the typical warbler.

It is not necessary to know the birds' names, to know the birds themselves. One can do as Adam did and give them names. To one who has been with them for an autumn, long forgotten bits of bird lore, picked up unconsciously, come back. The birds grow familiar and soon they will have classified themselves. Nothing but a wren, we are certain, though we never saw one before, could stick its tail up so straight; nothing but a kingbird would dart out of a tree in that determined way, and then settle quietly down in the same place, like the King of France and his ten thousand men. Those little brownish, mottled birds all unavoidably suggest the English sparrow. We had no idea there were so many kinds, but they *must* be sparrows, and it is much easier to tell them apart than we should have thought. The snowy front of the whitethroat, the "breastpin" of the 'song sparrow, the white tail feathers of the grassfinch (vesper sparrow), the red cap of the chippy—all these mark the individuals as plainly as the general coloring marks the family.

I well remember the process, as delightful as it was gradual, by which I made the acquaintance of the chickadees. The first time we met was on the occasion of their arrival in winter quarters, and a whole flock of the wee, downy, tricksy things, were celebrating it with all their might. The fluffiness, the bright eyes, the quick movements and the general hilarity of the new comers, made me christen them "titmice" on the spot. I had no idea what a titmouse might be, but feeling that no name could be more appropriate, I gave it to them, and called them so for six months before finding out that I had followed a true instinct. The chickadee is really a titmouse.

No other bird has such an unmistakable way of displaying himself among the winter weeds. He flutters down upon some dry and bending stalk, and swinging round upon it with all the recklessness of a boy on a new trapeze, shakes down the rustling seed in showers, catching it sometimes as it falls. You will see a dozen of them in some empty lot, as happy with their few coarse wild hemp plants as in the fields on a June day-probably happier. As the cold and the snow increase, and seeds grow scarce, they will "take to the road" like bold highwaymen, snatching what they can fairly under the horses' hoofs and seeming to find bits to their liking in the coldest, freshest snowdrifts.

The bluejay is a frequent visitor in town, and so is the hairy woodpecker. His name, by the way, is as hideous as that of most

other members of his family, for the handsome fellows are libeled as the "redheaded," the "three-toed," the "yellowbellied," and worse, as their common descriptive names. The brilliant tricolor
(red-headed) woodpecker is often seen in
the parks, and the warbling vireo likes
nothing better than to travel from tree
top to tree top down a crowded street.
Only he is quick and quiet, and if you are
to see him, the best way is from an upper
window, as he slips out of one hiding place
into another.

The most interesting of our discoveries may be made in town. It was in the heart of the business part of the city that I saw a bird which in spite of the weight of evidence against his appearing in that place or at that time, I shall persist in believing that rare visitant, the blue grosbeak. The exquisite cedarbird is quite willing to visit us occasionally, and I have seen a whole flock of them make their headquarters for a week in a poor, bare, straggling tree, standing alone amid forlorn back yards, surrounded by ash barrels and wood sheds. Even the shy brown creeper, whose one object in life, when he is at home, seems to be to put a tree between himself and all observers, will astonish you some morning by gliding in from the woods and slipping around the trunk of the cottonwood on the corner as if he had always lived there.

I have spoken of the comparative ease with which one learns to classify the smaller birds in the two great families of finches (sparrows) and warblers. For the larger and more conspicuous birds, too, one scarcely needs a teacher. We know, the very first time the scarlet tanager flits before us, as he may in the still, shady grounds of the hospital, or high among the trees fringing the water course of the park, that here is the "fire bird." The brilliant grackles, the "red-winged" and "yellow-shouldered" reed birds, you know at first sight are nothing but blackbirds, and again,

there can be no mistaking the business-like way in which a woodpecker flies straight to his tree, and rests there "as if he had been thrown at it and stuck." The woodpecker's charming cousin, the nuthatch, you are almost sure to see, too. He will be walking down a tree, head foremost, his constant and invariable habit. Sometimes it is necessary for him to go up, so as to start over again, but he will not do this if he thinks you are watching him, for he knows that his other performance is a unique accomplishment among birds.

After one has gained a general familiarity with the commonest birds, every glimpse will tell something new; their flight, their food, their song, their favorite perching places, their habits, gain fresh interest for you every day. Such as we know become more sharply and accurately distinguished from such as we do not know, and a single glance will often tell us enough of some new visitor, to enable us, if not to recognize him exactly, at least to tell his connections, and place him approximately where he belongs. On one memorable walk through the river bottom of the Mississippi, I added at least half a dozen birds to my list in this way.

I have given no more than the barest hints to indicate what can be done by a city-bred member of the Audubon Society, but they are hints that can be made a source of much pleasure and knowledge. The series of articles in the Audubon Maga-ZINE has said all that can be said as to the methods of work, besides giving in detail the marks by which to recognize the birds one may see. All that is attempted here is to tell a little of what can be done "in the birding line" even by those who have the fewest opportunities. For those who live in the West, it is interesting to watch for the birds which are less common in the Eastern States, and particularly such as have never been adequately described. There are many scarcely known species on the

plains, and even in the Mississippi Valley one may meet with birds which are distinctively western, though well enough known to all who have given any of their attention to bird study. Two of the handsomest are the brass grackle and the yellow-headed blackbird-both of them striking illustrations of the truth that there is no such thing as a black blackbird. may find the graceful shorelark in abundance, nesting on the bleak prairies as early as March, and coming down fearlessly to the roadside. These three, with the rosebreasted grosbeak, the bluejay, the northern shrike and the golden-winged woodpecker, are among the most beautiful of the Minnesota birds.

I have given a list in conclusion of some fifty of the birds oftenest seen, giving the locality. The first of these divisions, the birds seen in the city limits, is necessarily the smallest, and each succeeding list, if completed, would contain most of the birds mentioned in those preceding it. Thus, under D, I might put almost all the fifty; I have, however, given only two birds which I met nowhere but in the course of an occasional drive through the lake and farm country round St. Paul, Minn.

List A. Birds Seen in City Streets.—Purple martin, white-bellied swallow, robin, junco, chipping sparrow, goldfinch, chickadee, red-polled linnet, waxwing, bluebird, warbling vireo, purple grackle (crow blackbird), hairy woodpecker, downy woodpecker, pine grosbeak, brown creeper, bluejay, ovenbird.

List B. In the Parks.—Tricolor woodpecker, golden-winged woodpecker, nuthatch, Baltimore oriole, wood pewee, scarlet tanager, least flycatcher, yellow-rumped warbler, crown sparrow.

List C. In the Cemetery.—Wood thrush, hermit thrush, phæbe bird, black and white creeper, yellow-bellied woodpecker, brown thrasher, catbird, Maryland yellowthroat, redstart, kingbird, yellow-winged sparrow, song sparrow, Blackburnian warbler, redeyed vireo, red-bellied nuthatch, rose-breasted grosbeak.

List D. In Environs of City.—Brass grackle, bobolink, indigo bird, grass finch, fox sparrow, shorelark, meadowlark, yellow-headed blackbird, shrike (butcher bird), kingfisher.

HARRIETTE H. BOARDMAN.

HOW I LEARNED TO LOVE AND NOT TO KILL.

BY A MEMBER OF THE AUDUBON SOCIETY.

I KNOW that I was not an exceptionally cruel boy, and yet there was a time when I took delight in killing, just for the sake of killing, everything that could run or swim or fly. I do not think that any one ever told me it was wrong or showed me in any way how useless or cruel it was to go banging about the fields with my gun, ready to take the innocent life of any and every moving thing, be it bird on branch or tiny young squirrel not yet aware of the dangers and wickedness of this great rolling world.

How I ever managed to shoot the beautiful creatures, without getting a great pain in my own heart, I am sure I cannot tell you now, but I am certain that I must have had a very strange and different kind of a heart then—sound asleep perhaps, all the time. It seems to have taken a long time to teach me how brutal a thing I was, but I shall try and tell you how it came about, though it was not all at once, as you shall see.

One day in midwinter, when the snow lay deep in the woods, three of us were out rabbit hunting. I was standing in an open spot waiting for a sound of the dogs, when all three of them came velping out of the brush close upon the heels of a terrified little rabbit, which was making but poor speed through the drifted snow. Almost more excited than the dogs, for I was only twelve years old, I raised my gun and fired just as the foremost dog pounced upon the little creature, and having rescued my prize from Hector, put him carefully into the wide deep pocket of my new hunting coat. I killed two other rabbits that morning, and at last approached the old farmhouse where my companions had arrived before me. I put my gun in the house and came out to

display my game. I drew out one rabbit from the left pocket, and one from the rear pocket, quite proud of my success as a sportsman, then I went down into the wide deep pocket for my third and last rabbit. Out he came and was dropped upon the porch beside the others, when to my astonishment and the great glee of my companions, up jumped Brer Rabbit and went scampering off toward the woods, as fast as his poor cramped legs would carry him.

Certainly he had well earned his liberty after that terrifying day's ride in the clutches of his worse foe, but it would never do to be laughed at, anything rather than lose my reputation as a butcher, so running in for my gun I went hurrying after Mr. Bunnie, following his tracks in the snow. It was hard work for the poor tired little fellow. just escaped from such a dreadful experience, and he had but reached the margins of the wood, floundering along in the deep snow, when this awful boy came running and panting after him. There he sat resting on the clear white drifts, the beautiful little fellow, apparently quite dazed by the wonderfully bright world to which he had been so miraculously restored; but there was no eye for his beauty and no sympathy for his sad plight in the monster there behind. I remember, even now, as I raised my gun to fire, how a sudden pity came into my heart for the poor little tired and defenseless creature, so soon to be free again and back with his lonely fellows in the burrow, but there were the boys already laughing at me, and so bang went my gun. Still Bunnie jumped wearily on, for I had missed him. Certainly any but a monster might have had mercy after that, but there were the boys laughing harder than ever, and the spirit of my wicked old ancestor

Bloodyhand urging me on to slay, so putting my gun this time close to the little chap I ended his terrible fright with his life.

That was the last rabbit I ever killed. All that evening a great sorrow grew in my heart for the poor little fellow, so beautiful there in the white snow drift. I hated myself for my cruelty, and at length, unable to check the tide of my regret, burst into tears, and sat there by the fire sobbing bitterly, though I would not tell the other boys the cause. They would laugh at me again, laugh at me even because I was pitiful. What would I not have given only to restore the life of that one little animal, so innocent, so harmless and so beautiful? For days I was haunted by the thought of how I had chased that little rabbit only to slay him when "all the pleasure of possession ended as soon as he was dead."

During the following summer my father took us all to White Bear Lake in Minnesota, where, before the completion of the railroad, everything was wild and undisturbed. There was a Captain Carter who used to shoot well with the rifle, and it seemed to be one of his greatest ambitions to kill a loon, that large and beautiful bird known to naturalists as "the great northern diver," because of the remarkable way in which they dive and remain under water. So quick indeed is this great bird, that it is almost impossible to hit one of them with a ball, for they dive at the flash, and are gone from the surface before the shot reaches the ripples they have left behind.

I soon learned to love the loons; they were such strangely shy creatures and filled me with longings for the far off and lonely places reached by their swift flight. Hard enough was it for a loon to leave the lake, and only with a good wind to aid, could this strange bird lift himself over the treetops, but once in air, with a strange cry like a weird laughter, he would circle round and round, and at length shoot away like an arrow for some distant and more lonely

spot, disappearing from my longing sight, for somehow I always wanted to go with the loons.

One day Captain Carter had shot many times at a large loon—until exasperated by his failure, he determined upon a new way of loon hunting. Putting up a board screen to hide the flash of his rifle, he at length succeeded in hitting the bird in the left wing. The loon nevertheless dived, but being too badly hit to remain long under, came repeatedly to the surface, and was at length captured, still alive, by the delighted captain, who brought his prize to the little hotel, where he was soon surrounded by a crowd of curious and exclaiming guests.

I think it was certainly one of the most pathetic sights I have ever seen. There on the ground sat the beautiful bird, head erect, with the white ring round its coal black throat, and the softest melancholy in the large eyes, that were fixed with longing on the far away lake. Unable to stand on the land, it lay there wounded and helpless with such a dignity that all were moved who saw it.

"Captain," said a gentleman in the circle, "I'll give you ten dollars to set that bird free."

The captain hesitated.

"Gentlemen," said the captain, "I would gladly do as you desire, for I feel as badly about this as any of you, but the bird is too deeply wounded to live—it is too late."

This incident made a deep impression upon me, and I have ever since had such a sentiment in regard to the loon, that though often in camps further north where food was scarce, I have discouraged my Indian camp followers from killing him. One evening, however, I lay camped on an island in Ogitchie Muncie (Kingfisher) Lake. The Indians had gone off in the birch canoes in search of our supper, for our flour was exhausted and indeed we were all very hungry. The lake was smooth as a glassy

mirror, there was not a whisper even in the tallest pines. Suddenly, afar across the lake, from the deep recesses of some lonely bay, came a long, low, melancholy cry of a loon, the saddest, wildest cry in all the world. Heard usually at evening when the wind is hushed, this cry was always to me the most pathetic sound, and I longed to comfort the poor lonely bird. Soon after, there was the report of a gun, another and another, and then silence for a long time. I waited for half an hour, and there were no noises until I heard the soft scraping of canoe prows on the sands and knew that the Indians had come back to camp. I sprang up and went down to meet them. and alas! even as I feared, there was Shingibish holding up the dead loon by the neck, and calling out Mang-mang (the name of the loon in Ojibway) in evident pride at his success.

I looked sadly at the beautiful bird, smoothed the white feathers on his ruffled throat, and then turning to Shingibish I said: "Bad luck come to us now, Shingibish (diving duck), because you killed your brother."

It turned out even as I said, and on the next day in a storm of wind and rain, my canoe went to pieces on the rapids, and the few remaining luxuries of our provisions were lost beyond recovery. Never after that did they kill a loon, though on great Saganaga Lake they laughed at us and dived about us by hundreds.

There away north of Lake Superior, in the dense forests of Minnesota and Canada, is a region as yet hardly explored. Dark pines and balsams cover the rocky hills and mountains, and great lakes of crystal clearness shine out everywhere between — linked in an endless chain that stretches from the Lake of the Woods to Superior, the greatest of them all.

Here it was, in the heart of these deep

forests, that I was to learn my most beautiful lessons about birds and animals, for here with only a small white tent for a roof. and a few Indians as companions, I lived many days with the wild creatures of the woods. I call them wild creatures, but indeed they were not wild at all, so unused to harm and the cruelties of men and boys. that they hardly knew fear. Every day, when we spread our cloth for dinner in camp, came the little birch birds to perch on the pans and hop jauntily among the dishes—they had never been hurt by any one, why should they be afraid? Squirrels, too, came to dine with us, and I have had the younger ones sit upon my outstretched foot, to nibble at a morsel snatched without fear from our frugal board. They have never been stoned, and shot and hunted to death, why should they not be gentle and tame and trustful as God made them?

Here the ruffed grouse would perch in a tree quite secure until you picked them off with your hand, and the little spruce birds were quite as friendly as a trained canary.

So I established a sort of fellowship with the wild things of the woods, and learned a new and wonderful pleasure in finding myself no longer a fearful enemy to these pretty creatures. I lost all my old desire to kill, for I saw into the homes of little birds and timid animals, and it seemed awful enough and barbarous beyond words, to bring ruin to these charming little families. And so must it be with any one of you who will but take the pains to go and see the wild creature in its home places.

All of you can not perhaps reach the far away places of which I have been speaking, but you can learn the delight of friendship with dumb creatures anywhere in your home woods. When once you have felt this delight, you will throw away your guns, I know, and instead will carry a crust of bread or an apple to the woods.

BIRD HISTORIES.*

"KUKAVITZA"-THE CUCKOO.

WITHIN an ancient country called Servia, watered by the great Danube, and which is now a part of the Turkish Empire, where the people are very fond of quaint legends, the European cuckoo is called *Kukavitza;* and, as we almost might guess, this word, more Russian than Turkish, is the name of a young girl. The legend declares that long ago a young maiden of this name was so sorrowful owing to the death of a brother whom she fondly loved, and mourned so long that she became a bird of the cuckoo kind, a "kukavitza."

In Bohemia several stories of the cuckoo's ancestry are preserved in legendary lore. One seems to be not older than the Christian religion, but there is something of Pagan mythology in its imagery. It says: "One day Jesus of Nazareth was passing a baker's shop, and directed one of his disciples to go in and ask for some new bread. The baker refused to give it; then his wife and their six daughters proved themselves to be charitable by secretly conveying some bread to the hands of the followers of Christ. In reward for this benevolent deception, those seven women were placed in a group among the starry constellations, and named the Pleiades (we must not ask how soon after the bread was given were the women elevated so high). The penurious father was, at the same time we suppose, turned into a cuckoo. Apart from this story it has long been said that the voice of the cuckoo is heard in rural places as long as the Pleiades, the "Seven Stars," are visible in the sky above the horizon. The saying must have come from this legend, or else the legend was woven into the astronomy of these famous bright "sister stars," as poets have named them. In Bohemia at this day the cuckoo is regarded as a sort of apparition of a baker. And there among the young maidens another story is told of this bird, as follows: The cuckoo once wore a crown of feathers, until at a wedding of two birds, the bridegroom being a hoopoe, the crown was loaned to some other bird and was never returned to cuckoo, who ever since cries kluku, which signifies "you rascal!"

An Albanian tale of olden days says: There were once two brothers and a sister. The sister somehow by accident pierced one brother's heart with her scissors, and he died. She and the living brother grieved long, until they were transformed into cuckoo birds whose plaintive note ku-ku, ku-ku, means "where are you?"

In Slavonic mythology, Zywiec was the ruler of the universe. This god of Paganism, like Zeus, the supreme among the Greeks, the Jupiter among the Romans, used to change himself into a cuckoo in order to tell men how many years they were to live on earth.

Even now, in Poland and other Slavonic regions, it is commonly believed that a person, young or old, is to live only so many years as a cuckoo's note is heard repeated for the first time in spring. At one period the killing of a cuckoo in Poland was a capital crime.

In the writings of an early monk, it is related that a certain brother recluse became weary of his monastic life of seclusion, and solemnly asked a cuckoo to tell him the number of years he was yet to live. The bird answered twenty-two. The monk thought this number would allow him a season of the world's pleasures, and afterward time enough to think of the heavenly state, and so he became again a worlding.

^{*} Our young readers are informed that this series of legendary "histories" in a few words, are not designed particularly to relate the Natural History of the birds mentioned.

Alas! he was called to die much sooner than the bird-oracle had declared, and without religious preparation!

In ornithology there is a genus of cuckoos, and therefore numerous species or kinds. All have not the same melodious, plaintive voice, the soft *hooho-ho*, and another sound uttered while on the wing, like a low trill

on a flute, probably the call for the mate. The "Honey Guide" of Africa is a cuckoo—cuculus. One poet calls the cry of the English cuckoo "a wandering voice, seeming to float hither and thither." The female bird seems rather selfish; she lays her eggs in some other bird's nest, leaving them to be hatched by a stranger.

EMILY THACHER BENNETT.

A PLEA FOR OUR BIRDS.

In the summer of 18—, my home, for a few weeks, was at a farmer's house among the hills of northern Massachusetts. My favorite retreat, when I could quietly read, write or work, was in a grove a short distance from the house. Taking my camp chair, I could then, "fancy free," do whatever I wished without intrusion or disturbance. The native songsters of the woods, regardless of my quiet presence, made the air vocal with their sweet melody, while the shy squirrels and gentle rabbits would often venture from their hiding places to pick up the crumbs and nuts with which I supplied myself for their benefit.

Below me, for it was on a hillside where my cosy nook was situated, murmured a silver brook through a green meadow where a few native elms spread their graceful branches, among which the bolder and sun-loving birds built their nests and warbled their songs.

A more restful retreat for a tired body and mind could not often be found. The morning hours of a week had been thus delightfully spent with pen, book and needle, enjoying the carols of the sweet vocalists, and making acquaintance of the furry inhabitants of my charming grove.

But alas, one morning as I seated myself on my throne, for I felt like a rural queen over my undisputed realm, I was welcomed by no tones of musical welcome from my subjects. Not one of my four-

footed friends came forth to partake of the bountiful feast I had scattered around me. Grieved at being thus forsaken, I looked around to find an answer to the question, What has happened? I soon discovered the solution, for emerging from the grove I saw a man with a gun over his shoulder. and a basket in his hand, containing, I had reason to believe, the lifeless remains of many of the harmless birds which the day previous had furnished the music for my woodland orchestra. Just then he raised his gun and discharged it, and from the branches of an elm in the meadow, fell fluttering to the ground a golden oriole. He threw it, still alive, into his basket, there to die a lingering death. He then stalked away too far from me to listen to any remonstrances, which would probably have been wholly unheeded had he heard them.

I took my book and work and walked away, my kingdom having lost its charms. As I slowly sauntered through the grove, meditating sadly on this wanton, cruel sport, I heard low cries of distress proceeding from a nest which I had often watched as the patient mother robin sat on it, or flew off to bring food for her brood. On examination I found four tiny birds motherless and hungry, their mother being, I supposed, in the basket of the ruthless gunner, destined to ornament the bonnet of some woman, the mother, perhaps, of lit-

tle children. Could she have heard the wails of these little orphans, so soon to die of starvation, would she ever again adorn her hat with the plumage of birds? Always in the future will such decorations remind me of those piteous cries.

Another season, to avoid the renewal of these painful scenes, I went to the seashore. There I was never weary of the sight of old ocean as it rolled in tidal waves on the beach, the white surf beating in musical rhythm over the fissured rocks. In one of these sheltered cavities I found a seat commanding a view of the crescent-shaped shore for a long distance, and the marshes left by the retreating tide.

Here I spent my mornings watching the sea birds as they alighted to search among the sea weeds and grasses for their food, then soaring aloft till they were lost to sight in the blue ether.

Here might the naturalist find the avocet, or lawyer bird, as it is called, from the flippancy of its tongue, and perpetual clamor as it utters its sharp note of click, click; the curlew, with its pale brown plumage and white breast thickly spotted with red, the red-backed and the red-breasted sandpipers searching among the sea weeds for bivalve shells; the willet, whose loud cries of pill will-willet sounding almost incessantly along the marshes, may be heard at a distance of more than a mile. It is said that the affection and anxiety of this bird for its eggs and young are truly pathetic. "If a person enters the marsh he is beset by the willet skimming over his head and uttering a loud, sharp, clicking noise, as he approaches his nest."

Here also come the skimmer or cutwater, the greater or lesser tern, small birds of the duck kind; the red-breasted merganser, the beautiful and graceful goosander, which is in great demand for millinery purposes. But alas! it was not the lover of birds for the interest he feels in their habits, who came here with harmless

intent, but the fowler for mere wanton love of sport, or to supply the milliners with the beautiful plumage, whose presence was announced by the screams and sudden flight of the frightened birds.

Alas! for my quiet resting place. Where can I go to enjoy the health-restoring tones of ocean breeze, or the fragrant aroma of the pines and balsams of our inland groves, and escape the sight and sound of the death-dealing gun?

Until fashion, woman's despotic tyrant, is dethroned, and public sentiment is aroused to the cruelty and immorality of this traffic in these innocent songsters of the woods, these scenes will continue to be re-enacted.

Women are not heartless, but they have not been awakened to the extent and enormity of this wholesale slaughtering of the sweet songsters.

When they see the beautiful wings, breasts, and even whole bodies of birds on the counters and in the windows of milliners' stores, the questions where and how they were procured, does not occur to them, thinking, perhaps—if they think at all about it—that the birds shed their skins as snakes do, or that they grow like flowers.

If they realize the pain and barbarity involved in this business, and the sad loss of the music of our woods, soon to be silenced forever, if public sentiment is not aroused to a consideration of this subject, I cannot but think that every true woman would not for a moment hesitate to take the pledge never to wear any decorations obtained at such unmerciful cost; and that she would by every effort of which she was capable, discourage others from so doing.

The Audubon Society of New York is acting nobly in this cause, but it is slow and discouraging to contend with those engaged in this profitable but inhuman traffic.

The Society should have the support of

all earnest, thoughtful women, who by their example and speech should create such an enthusiasm as will produce a magnetic current which will draw into its ever widening circle so many intelligent women that to see a hat or bonnet ornamented with the wings or breast of a bird will be a novel and uncommon sight.

R. F. BAXTER.

SOME CHARACTERISTIC BIRDS.

A WIDE-AWAKE BIRD.

THE sharp-shinned hawk has been pronounced by Mr. Audubon "the miniature of the goshawk." Not only is this likeness in its appearance, but in the irregular, swift, vigorous, varied, yet often undecided manner of flight, which is at times, however, greatly protracted. It moves by sudden dashes, as if impetuosity of movement were essential to its nature, and pounces upon, or strikes such objects as best suit its appetite, but so very suddenly that it appears quite hopeless for any of them to try to escape.

It is often seen descend headlong into a clump of briers, regardless of all thorny obstacles, and to emerge from the other side clutching in its sharp claws a sparrow or a finch. At other times, two or three of them may be seen conjointly attacking a golden-winged woodpecker, which has taken position against the bark of a tree in fancied security. While defending itself from the attack of one or two of these hawks, the woodpecker is usually vanquished by the efforts of another, which thrusts its legs forward with vivid quickness, protrudes its sharp talons and seizes its victim by the back, which it tears and lacerates. Thus wounded, it falls to the ground with its captor; a disengaged hawk now tears out its vitals with its claws, and the repast of the assailants commences.

Young chickens are often seized by it even in the presence of their keepers, and

as many as twenty or thirty have been carried away by one hawk in as many consecutive days. Birds of various sizes, from the smallest warbler to the passenger pigeon, are included in its food.

The roosting places of these hawks, in ordinary seasons, are in the fissures of rocks, in tall trees in isolated situations, and in precipitous declivities overhanging turbulent streams; but it cautiously retires after daylight has departed, and leaves its resting place before the light of morning. Its nest has not often been invaded by the curious investigator into its habits at the season of incubation. Mr. Audubon says: "I found a nest of this hawk in a hole of the well known 'Rock-in-cave,' on the Ohio river, in the early part of the spring of 1819. It was simply constructed, having been formed of a few sticks and some grass carelessly interwoven, and placed about two feet from the entrance of the hole. The eggs, four in number, were nearly They were almost equally roundhatched. ed at both ends, though somewhat elongated. Their ground color was white, with a livid tinge, scarcely discernible, however, amidst the numerous markings and blotches of reddish chocolate with which they were irregularly covered."

He afterward found a nest in the hollow prongs of a sycamore, on the Ohio, near Louisville, and another in the forks of a low oak upon the prairie land near Henderson, Kentucky.

G. B. G.

THE AUDUBON NOTE BOOK.

MEMBERSHIP RETURNS.

THE registered membership of the Society on March 31, 1888, was 45,154, showing an increase of 846 members during the month, drawn from the following sources:

New York	112	Missouri	€6
Massachusetts	37	Kentucky	5
Pennsylvania	343	Illinois	24
Maine	32	Delaware	3
Connecticut	16	Tennessee	I
New Hampshire	11	Vermont	1
New Jersey	8	Colorado	I
Ohio	24	Georgia	2
Michigan	22	District of Columbia	I
Iowa	39	Wisconsin	II
Indiana	3	Canada	43
West Virginia	24	England	13
Mississippi	4	-	_
			846
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C. F. AMERY, General Secretary.

THE AUDUBON MONUMENT.

THE subscriptions on behalf of the Audubon Monument have not flown in as freely as might have been expected; the funds contributed by the Audubon Society during the month are:

Forest and Stream\$25	00
Miss Florence A. Merriam 5	00
Mrs. E. S. Forster	00
Mrs. H. A. Dodge	00
Miss Mary D. Dodge	50
Mrs. Sophia Hemp	25
	_
\$32	75

Leaving us to infer that a great many members of the Audubon Society think twice before giving once. Unless next month's returns show better results we shall be led to conclude that the Audubon Society will hold but a limited amount of stock in the Audubon Monument.

FOR THE PROTECTION OF SMALL BIRDS.

WE learn from the *Indiana Farmer* that at the presentation of a paper lately to the Academy of Sciences on the importance of legislation for the protection of insectivorous birds, the following resolution was adopted unanimously:

"Whereas we view with alarm the great destruction of native birds for mercantile purposes and recognize, that, without proper legal restraints enforced by public opinion, great injury is threatened the agricultural and horticultural interests of our State by reason of this destruction removing an important check upon the growth of insect life; therefore be it resolved that we respectfully call the attention of the members of the General Assembly of the State of Indiana to the necessity of the enactment of string-

ent and adequate laws for the protection of cur wild birds other than game birds; and that a committee of three members of this Academy be appointed to present, for the consideration of the members of the General Assembly, a draft of a law which they think will prove in every way satisfactory, as a means whereby existing evils may be corrected within our commonwealth, and at the same time provide for a proper study of our birds, in their scientific and economic relations."

NESTS.

NESTS are the structures which amimals prepare for the rearing of the young. They are very different, not only when the creature which constructs them belongs to widely separated divisions of the animal kingdom, but often when the animals are of the same class. While some construct very simple nests, those of others are very curious, and delicately framed, others make no nests at all. Among mammals the only nest builders are certain rodents, as rats, mice, squirrels, etc.

The structures of some of these species are as artfully contrived and as beautiful as the nests of birds. It is among birds that nest building is most general. Some birds' nests consist of merely a few straws or leaves collected together, and such material as twigs, straw, moss, hair, etc., are used in nest building. A very singular nest is that of the tailor bird, made by sewing together the edges of leaves.

No reptiles are known to construct nests, their nearest approach to it being to make a hole for their eggs in the sand or some other soft material.

An important article of commerce between the East Indies and China are the nests of several species of swallow. The nests are sold from 2s. to 7s. apiece, and of course are used only by the most wealthy Chinese, who use it for thickening rich soup.

Condors make no nests, but simply lay their eggs in the hollow of a rock, so that they cannot roll out.

The nest of the vulture is made on the most inaccessible heights, and is of larch branches intertwined with wool, hair and feathers. It is flat, and measures four feet across.

The robin begins his nest in the same way as a carpenter would a house; first he makes the framework, then plasters it and lines it with straw or moss.

The nest of the red-bird is very fine, being made

of rags and string woven together and lined with cotton.

Woodpeckers and yellowhammers make their homes in holes made in decayed trees.

Crow blackbirds make no nests. They lay in some raincrow's or other bird's nest, while the owner is away. The quail, starling and meadowlark build on the ground. Nests are made large or small, according to the size of the builders. Most of them are wonderfully constructed, and display exceeding skill on the part of the builders.—Carl Evans in Agassiz Record.

AUDUBON WORK AMONG THE INDIANS.

Miss E. B. Barry, our enthusiastic young representative at Germantown, Pennsylvania, informs us that some time ago she wrote a letter to the Carlisle Indian School in behalf of the Audubon Society, explaining its objects and inclosing some pledge forms. "I heard nothing from them," she writes, 'until yesterday, when I received the *Indian Helper*, a paper published and printed by the Indian boys of the school, in which my letter was published in full, together with a few editorial lines, encouraging the boys and girls to sign the pledges." We have one red Indian in our cosmopolitan army of forty-five thousand, but there is now some prospect that with Miss Barry's aid we shall be able to organize an Indian contingent.

MR. DE YOUNG'S SEAGULLS .- There are three seagulls that frequent New Haven harbor and are nearly as tame as the proverbial duck, although not in the least way restrained in their actions. They are simply wild pets, and recognize as their master Mr. E. F. De Young, the purser of the steamboat Northam. When the steamboat is leaving the New Haven dock the gulls will sail in graceful circles just above her until the boat is clear of the wharves, and then they swoop down astern or on the quarter and wait for Mr. De Young to stand treat. That gentleman's appearance on the guards is the signal for delighted squawks from the birds, who will fly in little circles, sometimes so closely bunched as to be in each other's way, but all watching carefully the food in the hands of their friend. Bit by bit the pieces of bread or fruit are thrown to the birds, who sometimes have lively fights over a particularly choice morsel. The treat lasts nearly to the mouth of the harbor sometimes, but when the boat gets that far the gulls, with little cries of seeming gratitude, circle a few times around and return to the vicinity of the docks. For nearly two years Mr. De Young has kept this up, although the birds generally go away for a while in the winter, but always return with the spring. A strange feature of the matter is that Mr.

De Young, when running on the steamboat Continental in the midwinter months, cannot find his pets, but as soon as the Northam begins running in the spring the birds come back, they evidently knowing the difference between the boats as well as their friend.

THE membership of the Audubon Society, which now exceeds 45,000, suggests the employment of a great deal of activity and energy for their enlistment, and it will perhaps surprise many of our readers to learn that more than one of our Local Secretaries have been confirmed invalids. One of these-Frank Pendexter-who died at his parents' house in Intervale, New Hampshire, at the close of March, was prostrated all last summer on a bed of sickness from which there was no hope that he would ever rise again, but as Local Secretary of the Audubon Society, and President of the Marvin Band of Mercy, he was a cheerful and earnest worker, and succeeded in interesting great numbers of his father's guests who made Intervale their summer retreat. One of our correspondents who visited him last summer, writes of him in very kindly terms, and many more of last year's visitors to Intervale will feel sad to know that the gentle, earnest, bedridden boy has finished his work and gone to his rest.

OREGON is taking measures to secure the presence of singing birds in that State. One thousand dollars has been subscribed, and arrangements have been made to import from Germany nightingales, skylarks, bullfinches, chaffinches, goldfinches, thrushes, linnets, starlings, and other birds to the number of 700. They will arrive in time to nest and rear their young, and it is considered certain that they will return to Oregon from their winter migration to the South. State laws will be enacted for their protection.

POT LUCK FROM A RELIGIOUS WEEKLY.—Snow-birds make delicious little morsels when cooked as follows: When plucked, washed, and cleaned, have some large-sized potatoes peeled, and scoop out the insides with a blunt knife. Cut a slice from the end, so the potatoes will stand; put a bird into each, head end first; place a piece of butter into each, and bake in the oven until the potatoes are done. Serve on a hot dish.

MISS CROSS, of Lockport, writes: "We had a debate at school the other day, on which have the more curious habits, birds or insects, and I noticed that several of the children had the Audubon Magazine. It is a good little book, and being so cheap enables every one interested in such things to have it. I shall use it at school."

EMINENT PEOPLE ON BIRD PROTECTION.

OAK KNOLL, Danvers, Mass., 2nd mo., 20, 1886.

Editor Forest and Stream:

I heartily approve of the proposed Audubon Society. We are in a way to destroy both our forests and our birds. A society for the preservation of the latter has long been needed, and I hope it is not too late for the accomplishment of its objects.

I could almost wish that the shooters of the birds, the taxidermists who prepare their skins, and the fashionable wearers of their feathers might share the penalty which was visited upon the Ancient Mariner who shot the Albatross. Thy friend,

JOHN G. WHITTIER.

BROOKLYN, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I am heartily in sympathy with your purposes for the protection of birds, and should be glad to contribute any influence that I can to that end.

If there were no purchasers there would be no demand, and no reason for slaughtering these winged gems. But as only women create a demand, it rests upon them to stay this wanton destruction. I am sure that it is only necessary to bring before American women the cruelty of this "slaughter of the innocents" that fashion is carrying on, to secure a renunciation of this ornament and the salvation of birds.

On this subject the kind feelings, the taste, and æsthetic sympathy of the whole community are on your side, and if you persevere you will surely win.

HENRY WARD BEECHER.

Cornwall-on-Hudson, N. Y., Feb. 22, 1886.

Editor Forest and Stream:

You have indeed my hearty sympathy in every effort to prevent the slaughter of my innocent little neighbors and friends, the birds. In the destruction of forests and birds, the people of this land are inviting very great evils and inflicting wrongs on posterity which scarcely can be measured. The press should render it impossibe for women to sin thoughtlessly and ignorantly in demanding little birds for their adornment. The evil should be brought home so fully to the knowledge of all, that the continued wearing of our useful little birds should become the badge and indication of a callous, vulgar nature. You are doing a humane and patriotic work in exciting public aversion to one of the most cruel and stupid wrongs of the age.

Respectfully yours,
EDWARD P. ROE.

West Park, N. Y., Feb. 20, 1886. Editor Forest and Stream:

I scarcely need assure you that your undertaking to form a society for the protection of our wild birds against the ravages of the milliners and the sham scientific collectors has my warmest sympathy and approval. It is a barbarous taste which prompts our women and girls to appear upon the street with their head gear adorned with the scalps of our songsters; and it is mere vanity and affectation which prompts so many persons to make up cabinets of the nests and eggs of the same. The destruction of our birds from their natural enemies is immense, and this craze of the collectors, and folly of the milliners and their customers in addition, threatens their serious diminution.

I hope you may succeed in creating so strong a public sentiment upon the subject that the collectors of skins and eggs for the unworthy purposes of fashion or to indulge the vanity of pseudo-naturalists may suddenly find their occupation gone.

Please add my name to the list of the members of the AUDUBON SOCIETY. Very sincerely,

John Burroughs.

160 W. 59TH STREET, NEW YORK, Feb. 20, 1886.

Editor Forest and Stream:

No one who will take the trouble to give the matter a few moments' serious consideration can be in doubt, I think, as to the wisdom of organizing the AUDUBON SOCIETY, and I am thankful that such a step is contemplated. There is an element of savagery in the use of birds for personal decoration, which is in grotesque contrast with our boasts of civilization. But even the savage stops short, as a rule, with the feathers. It is only Christian people who think it worth while to butcher a whole bird to adorn their head gear. I am sure, however, that this is largely from that unreflecting habit which is a leading vice in people who follow the fashions. But it is a vice; as Hood sang, when he wrote—

For evil is wrought By want of thought As well as by want of heart,

If the Audubon Society can teach men, and especially women, to think on this subject, half of the battle will have been won. Henry C. Potter.

Andover, Mass., Feb. 21, 1886.

Editor Forest and Stream:

I am in earnest and indignant sympathy with the motive of any society organized to prevent the murder of birds for decorative purposes.

E. S. Phelps.





BLACK AND WHITE WARBLER.

(Mniotilta varia (LINN.))

THE AUDUBON MAGAZINE.

VOL. II.

JUNE, 1888.

No. 5.

BLACK AND WHITE WARBLER.

THE subject of our illustration this month belongs to the important group known to naturalists as Wood Warblers, Sylvicolida. This is with one exception the largest family of North American birds, only the finch family, Fringillidæ, exceeding it in the number of its species. The Wood Warblers are all small birds, very few of them being over five inches in length, and many of them much less. Most of them are bright and beautiful in color, blue and yellow, orange and black, and white and chestnut, being oddly mingled in their plumage. . The sexes are usually unlike, the females being much plainer colored than their mates. Besides this, there are changes of color at different seasons of the year, which may make the bird of the autumn appear entirely different from the same one in spring. Although called Warblers, this is an entire misnomer for most of the species, whose powers of song are limited to rather feeble trillings, which scarcely deserve to be called songs. There are, however, notable exceptions to this rule, such is the noisy yellow-breasted chat, and some of the so-called water thrushes or wagtail warblers, whose vocal powers are of a very high order.

It is unnecessary here to give the characters which mark this family. Their small size and their active habits of fluttering about among the branches of trees make them conspicuous objects, especially during

the spring migrations, when they are to be seen everywhere, and form one of the most attractive features of our loveliest season.

To give some idea of the habits and life characteristics of this group of birds we quote from Dr. Coues, who has happily written of them. He says: "The Warblers have we always with us, all in their own good time; they come out of the South, pass on, return, and are away again, their appearance and withdrawal scarcely less than a mystery; many stay with us all summer long, and some brave the winter in our Some of these slight creatures, midst. guided by unerrring instinct, travel true to the meridian in the hours of darkness, slipping past 'like a thief in the night,' stooping at daybreak from their lofty flight to rest and recruit for the next stage of the journey. Others pass more leisurely from tree to tree, in a ceaseless tide of migration, gleaning as they go; the hardier males, in full song and plumage, lead the way for the weaker females and the yearlings. With tireless industry do the Warblers befriend the human race; their unconscious zeal plays due part in the nice adjustment of Nature's forces, helping to bring about that balance of vegetable and insect life without which agriculture would be in vain. They visit the orchard when the apple and pear, the peach, plum, and cherry are in bloom, seeming to revel carelessly amid the sweetscented and delicate-tinted blossoms, but,

never faltering in their good work. They peer into the crevices of the bark, scrutinize each leaf, and explore the very heart of the buds to detect, drag forth, and destroy those tiny creatures, singly insignificant, collectively a scourge, which prey upon the hopes of the fruit grower, and which, if undisturbed, would bring his care to nought. Some Warblers flit incessantly in the terminal foliage of the tallest trees; others hug close to the scored trunks and gnarled boughs of the forest kings; some peep from the thicket, the coppice, the impenetrable mantle of shrubbery that decks tiny watercourses, playing at hide and seek with all comers: others more humble still descend to the ground, where they glide with pretty mincing steps and affected turnings of the head this way and that, their delicate flesh-tinted feet just stirring the layer of withered leaves with which a past season carpeted the ground. We may seek Warblers everywhere in their season; we shall find them a continual surprise-all mood and circumstance is theirs."

The Black and White Warbler is in many ways an interesting bird. His relationship to the ordinary brown creeper, so common in our forests in winter, is not distant, and he seems also to connect the Carebida or honey creepers, tiny tropical birds of brilliant plumage, with the true warblers. many of its habits it closely resembles the brown creeper, and like it gleans its living chiefly from the trunks of trees, which it ascends by short hops, supporting itself as it goes up, by pressing its tail against the bark, somewhat as the woodpeckers do. It is an active, vivacious bird, almost constantly at work, now clambering about the moss-covered tree trunk in a most businesslike way, and again making short dashes into the air to capture some passing insect which its quick eye has noted.

This bird is one of the earliest of its tribe to reach the Northern States, and often makes its appearance in New York and southern New England about the middle of April, and so before the trees show signs of bursting into leaf, and while the whole landscape is brown and bare. It is then an attractive feature of the woods and fields, and its active movements, and even its thin, nasal song help to brighten up the dreary season of waiting. Later, when his more richly clad companions fill the woodlands and the shrubbery, we should not miss the Black and White Creeper if he were to be taken away, but when he first comes he is very welcome.

This bird breeds with us, though perhaps not in great numbers. He is a ground nester by preference, though sometimes he builds a few feet higher. Audubon tells us of nests in a hole in a tree. Mr. H. D. Minot found one "in the cavity of a tree rent by lightning and about five feet from the ground," as well as one "on the top of a low birch stump." Wherever placed, the nest is a strong, substantial structure, built of dry leaves and strips of bark which are so similar in character to its surroundings as to admirably conceal it, and make it very difficult to detect. Four eggs are usually laid, about $.7 \times .5$ inches in length. They are creamy white, and are finely dotted with brown and lilac, the spots being most numerous about the larger end.

The Black and White Warbler is about five inches long, and its outspread wings measure seven and one-half inches across. As implied in the name the bird's color is black and white, the white seeming to be the ground color and the black being laid on in streaks. The top of the head is white bounded by a line of black on either side, and this by a line of white passing over the eye. The chin, throat and wings are black, the latter crossed by two white bars. The belly is white. All other parts are streaked with black and white. The bill is black and the feet and legs brown. The females and young of the year lack the black throat, which in them is white.

LEXANDER WILSON has sometimes been styled the father of American ornithology, but it was not until the year 1804 that he thought seriously of studying for the task of describing and illustrating the birds of North America. Audubon, who was some fourteen years his junior, was then already dreaming of achieving distinction in the same field, and had long been devoting himself to it in amateur fashion. But in the order of publication. Wilson took precedence, bringing out his first volume in 1808, while the first five parts of Audubon's more elaborate work were not given to the public until nearly twenty years later.

Wilson was an enthusiast, and perhaps in his way as much of a dreamer as Audubon, but he was not like Audubon contented with dreaming. His was a clear practical nature, that prompted him to set about the immediate realization of his dreams, and the adoption of all necessary means to the desired end.

Audubon may be said to have been born to the work, Wilson to have drifted into it, and to have succeeded not so much by any special aptitude, as by virtue of an earnestness of character, and an energy of pursuit, which would equally have enabled him to achieve success in almost any other department.

Both Wilson and Audubon were essentially pioneer naturalists, men who went to nature direct, studied the birds in their haunts, drew from the life, and described from personal observation; but while Wilson was equally with Audubon undeterred by distance, danger, or fear of privation, we think it may be safely said that the woodsman's life, in and for itself, had no especial

charm for him, as it had for Audubon. He pursued it only as a means to an end.

The little manufacturing town of Paisley, near Glasgow, in Scotland, in which Wilson first saw the light, has claimed him for her own, but America cannot be unmindful of one who devoted the best years of his life to her service, and achieved results in his chosen field, which bear comparison with anything accomplished by the children of the soil; and now that we have completed our sketch of Audubon, our readers will be glad to have his place taken by another great laborer in the same field.

Alexander Wilson was born in Paisley, the principal manufacturing town of Scotland, on the 6th of July, 1766. His father was a gauze weaver in Paisley, where he spent the greater part of his life, but subsequently to the birth of Alexander he removed to Auchin Bathie Tower, near the village of Lochwinnoch, thinking by more extended and varied employment to improve the condition of his family. he rented a piece of ground, which he cultivated himself, ran several looms, and did a trade in distilling and smuggling. bore the character of a shrewd, upright, and independent man, and was generally respected among his neighbors, who were disposed to look on distilling and smuggling with a very lenient eye.

A century ago, when Alexander Wilson was in his youth, the Paisley weavers were as intelligent, well informed, and independent a body of men as was to be found in the United Kingdom. Working by piecework at fairly remunerative rates, they were not constrained to work long hours for a living, and, while a certain portion of them spent their leisure at their clubs

discussing politics and social questions generally, under the influence of Scotch ale and whisky, there was another section which, temperate both in its habits and discussions, sought to reach intelligent and tenable views on these subjects; and many of its members devoted themselves to the study of mechanics, natural history, botany, etc., for which their well-stocked libraries afforded all necessary facilities.

These Paisley weavers were a shrewd, well-informed body of men, many of them even well educated, but self-educated.

On the part of the Scottish peasantry there is a very general ambition to prepare one son for the church, and we are informed that the elder Wilson entertained such designs for Alexander, who at ten years of age was placed under the charge of Mr. Burlas, a student of divinity, who later acquired quite a reputation as an instructor of youth in the higher branches of learning, especially in the various departments of science. But Alexander's mother died soon afterward; his father married again; the family kept on increasing, and finally it was decided that the expenses incident to bringing one of the sons up to a learned profession were too great a strain upon the family resources, and so, at the age of thirteen, the young Alexander, very much to his disgust, was taken from his studies and bound apprentice to Mr. William Duncan, an operative weaver in Paisley.

During these three years of his apprenticeship, he appears to have devoted himself honorably to the duties of his position, but his heart was not in it. He lost no opportunity of indulging in reading, and romance weaving, and of cultivating a taste for versification. Among the Paisley weavers of his day, he was thought as much of for his published poems, as for his more solid achievements as a naturalist, but beyond evidencing a ready faculty for narrating in rhyme, his verses have little real merit.

Having completed his apprenticeship, he labored as a journeyman, only to the extent necessary to supply his needs. Much of his time was spent in reading and in attempts to turn his ideas into verse. a while, he became journeyman to his father and wrought for a time with more steadiness, but the thought that he had been disappointed in his prospects of a higher profession-his utter distaste for the career chosen for him-and the higher feelings awakened by such literary culture as he had imbibed—all conspired to fill him with discontent and unrest; and so it happened that he was not infrequently seduced away from the task of bread earning to ramble among the woods of Castle Semple, or along the banks of the romantic and beautiful Calder, where he brooded over what he deemed his ill-fated lot, and planned schemes for future advancement.

At this period of his life, Wison appears to have been a very diffident man, and slow to feel or inspire confidence—a self-conscious young man, in fact, extremely sensitive to the opinion of others; and being of a retiring disposition and shrinking from society, he gave himself up to the study of the Classics and English poets, very much to the neglect of his loom, but very much also to the cultivation of his mind. He found himself, in fact, out of his natural element, and wanting only an opportunity to drift away from it, into something more congenial.

In the course of his rambles by the Calder, his meditations were occasionally interrupted by the timid hare or startled grouse, and in due course a gun became his constant companion. The game laws were then not so strictly enforced as now, and as time wore on, the game afforded practical motive for his numerous wanderings, and Wilson became as much poacher as weaver or dreamer. He was going back to nature and becoming familiar with her.

A MONG the remarkable birds is the chauna, whose occiput is adorned with a circle of erectible feathers. The head and upper part of the neck are only covered with down, and it has a black collar. A singular phenomenon is exhibited by the circumstance of its skin, even that covering its legs, being inflated by the interposition of air between it and and the muscles, so that it crackles under the finger. This bird feeds principally on aquatic herbage, and the Indians of Carthagena rear some among their flocks of geese and poultry, as they deem it very courageous, and capable of repulsing even a vulture.

The species known as the horned screamer, called camouche in Cayenne, and larger than a goose, bears on the top of its head a singular ornament, consisting of a large and slender movable horny stem. This bird inhabits the inundated grounds of South America, and its very loud voice is heard afar off. It feeds almost exclusively on aquatic herbage. The trachea of this bird has an abrupt bony box or enlargement about the middle.

The avocet, of Europe, is a handsome bird, of slender form, which frequents the seashore in winter, where it feeds by scooping, as it is termed, with its singular bill, drawing this through the mud or sand from right to left as it advances its left leg foremost, and *vice versa*, seizing whatever living prey is thus met with. The mandibles of its beak have often been compared to two thin slices of whalebone.

The ruff, a true sandpiper by the bill and feet, is very celebrated for the furious combats which the males wage in spring for the possession of the females. At this epoch the head becomes partly covered with red or yellow papillæ, and the neck is furnished with a very considerable collar or ruff of lengthened feathers, so variously

marked and colored in different individuals that two can hardly ever be found alike. In this species the male exceeds the female in size, which is unusual among the sandpipers.

The European bittern is found among the reeds, whence it emits its terrific voice, which has caused it to be designated *Bos taurus*. This bird runs with great celerity, like a rail, flies also with unwillingness and with its legs hanging. During the day and when surprised it puffs out its plumage in an extraordinary manner, and strikes with its spear-like bill. In the evening it rises to a vast height in the air, in spiral circles, occasionally bellowing in its flight.

The boat-bill, which inhabits the hot and humid regions of South America, would completely resemble the heron in the strength of its bill and the kind of nourishment resulting therefrom, were it not for the extraordinary form of that organ. But upon close examination it has been found that it is merely the beak of a heron or bittern very much inflated; in point of fact, the mandibles are singularly wide from right to left, and formed like the bowls of two spoons, the concave sides of which are placed in contact. These mandibles are very stout and sharp-edged, and the upper one has a pointed tooth on each side of its tip.

The hoazin, an American bird, greenish brown, and a very curious bird, is perhaps the most insulated species of the whole class. It is found in Guiana, perching along the margin of inundated places, where it subsists on leaves and the seeds of a species of shrub. Its anatomy is altogether unique, exhibiting a peculiar adaptation for deriving nutriment exclusively from foliage. It is said that the gizzard of this bird is no bigger than an olive, while its crop is of enormous dimensions.

The wryneck is a very peculiar bird, feeding principally on ants. Instinctively trusting to the close resemblance of its tints to the situations on which it alights, it will lie close, and sometimes even suffer itself to be taken by the hand, or on such occasions will twirl its neck in the most extraordinary manner, rolling the eyes, and erecting the feathers on the crown and throat, occasionally raising the tail and performing the most ludicrous movements,

then, taking advantage of the surprise of the spectator, will suddenly dart off like an arrow.

The nuthatches, which feed largely on various seeds, are celebrated for the instinct of fixing a nut in a chink while they pierce it with the bill, swinging the whole body as upon a pivot, to give effect to each stroke. These birds lay up stores of food like the tits. Their note is remarkably loud, and disposition fearless.

GEORGE B. GRIFFITH.

THE WHITE ANT.

NE of the very earliest and most important of the earth builders was the white ant; his remains have been found in carboniferous strata, which was ages before the black ants appeared. Both in their social organization and in the structure of their buildings the white ants of India or of Africa to-day may differ widely from their earliest ancestors. The experience of countless ages and the frequent change of the conditions to which they have been subjected cannot have been without its influence on creatures of so high an order of intelligence, but in the character of the work they perform there has been no change.

Through all the ages the white ants have existed everywhere in the forests of warm countries, and have faithfully performed the very important world's work of eating up the trees—trunk, bark and branches—as fast as they died, and converting them into soil for the support of richer vegetation.

The white ants are found in the forests of North America, but not in great numbers. The work of eating up the dead timber is here shared by many other insects and their grubs; but in the forests of India and Africa and other tropical countries the work is performed principally by white ants, which are still so numerous that not a particle of timber is allowed to go to decay.

They eat everything. In the early spring, as soon as the outer bark of the trees begins to crack and dry up, every trunk shows traces of the white ants which are busy eating the dry bark, and leaving in its place a granular earthy shell which peals or crumbles off in the course of a week or two. leaving the trees looking as neat and clean as a new pin. If a branch is decayed the white ants find it, enter it generally at the end, eat galleries through it first, and then clear out all the inside, leaving a shell, which soon gets blown down by the wind. If the decay penetrates into the heart of the tree the white ants follow it, and eat the heart of the tree down to the roots. I have had scores of trees cut down—trees of twelve feet and more in girth—but mere shells of sapwood six or eight inches thick. The white ants had eaten all the heart.

If a tree falls in the forest the white ants just wait until the sap ceases to circulate before they commence to pass it through their little systems. Months may pass by and the fallen trunk look unchanged, but the white ants are boring away in all directions inside, and in a year or two there is only a little ridge to mark where the trunk lay—the timber has all been eaten and converted into a ridge of fine mould, which soon mingles with the soil. This is a very

useful work, because it makes the soil so much deeper and richer; but as the white ants eat dry wood wherever they can find it, without thinking about the consequences, they do a great deal of damage when they get into buildings-and there is no possibility of keeping them out. They make their nests in the mud walls of the natives' houses, and then eat up all the inside of the beams and rafters, until there is nothing but a shell left as thick as paper. Smeathman says that they find out which beams support the principal weight and fill up the inside with hard cement. I have never seen them do this, but they build their pyramids with an outer crust as hard as freestone, and the walls of their underground nests are built of the same material, so I think it very likely that they sometimes select the largest beams to build their nests in, and fashion them with the Whether they pass the same material. earth through their bodies with their food as the earth worms do, or whether they simply prepare it in their mouths, I do not know.

They eat pine and other soft woods so quickly that no one ever uses such wood in India. The deodar, or cedar of Lebanon timber, they will not touch, but no wood is too hard for their little jaws. Nearly all the furniture in India is made of rosewood, and as long as it is moved and dusted every day it is safe, but a common article in the houses of Europeans in India is a round center table on a very solid pedestal, with another solid foot-piece held about three inches from the floor by four feet. These tables they constantly attack; they get underneath the foot piece and build little hollow cylinders as thick as a quill up from the floor, and run up and down inside them, and if they are left unmolested they soon hollow out the foot-piece and the pedestal, leaving nothing but a thin shell.

I once packed a very valuable lot of several hundred books in cases, and stored

them for six months while I went to the hills, and on my return I found the books partially eaten, and all spoiled. They eat leather too, very greedily, leaving nothing but a little layer of fine granular mould. They have been troublesome in the Government treasuries. Hundreds of thousands of rupees are kept piled up in bags of five hundred or a thousand, and sometimes the white ants get in and eat all the bags.

Some years ago an East Indian treasury clerk was two thousand rupees short, and when asked to account for it, said the white ants must have eaten it; but the treasury officer did not believe him, nor would any one else, for although the white ants have strong jaws, they cannot eat silver.

The white ants commonly form their colonies and build their towns below ground, dividing them into a great many apartments for dwellings, store-rooms, nurseries and a royal chamber, with a great many passages running from one to the other; but their most wonderful structures are the pyramids figured in the cut, which they sometimes build above ground in India and in Africa, making them generally five or six feet through at the base, and raising them six or eight feet high. They build these pyramids of quite soft wet mud, but it dries in a few days and becomes as hard as stone. This is because each little pellet is either mixed up or coated with the saliva or secretion of the ant, which cements it all together and hardens it, most likely by chemical action.

They did not build these pyramids in very ancient times, and most likely not until man had been a long time on the earth. We know this because they never build them on the bare ground, but only when they have the stump of a tree to build around, and it is very rare to find a stump unless the tree has been cut down. If they always built their towns above ground in

this way we would say it was done by instinct, but as they generally build in the ground, and only erect a pyramid when they have a convenient stump to begin on, we are sure that they are capable of learning by experience. They never begin a

pyramids stand for many years, but they crumble at last and are mingled with the soil.

White ants are very frequently charged with destroying living plants, and they are certainly often found in positions which



PYRAMIDS OF THE WHITE ANT.

pyramid around a standing dead tree, nor around a fallen log; these they always eat from the inside, but a large stump is very convenient to build on—they have food at hand all the time they are building; while they are eating the stump they build their chamber and passages in the hollow, and when they have eaten all the roots they have convenient hollows for building subterranean chambers and passages. These

lend a color to the belief. In a young plantation of fruit or timber trees a certain proportion die, and if one of the dead plants is pulled up the roots will generally be found infested with white ants, which are consequently blamed for killing the plant; but after careful study of this subject I am perfectly satisfied that they will not touch any part in which the sap is circulating. Directly a root dies they begin

to eat it, and extend their ravages as fast as it dies; but they have no part in causing its death. On the contrary, the secretive powers, and consequently the health of the tree, is maintained by white ants and other creatures, especially soil microbes, eating away the outer bark of the roots as fast as it decays, and converting it into plant food to be again taken up by the roots

A community of white ants consists generally of a king and queen, a small army of soldiers, and the great body of the community which are the workers. The queen is so fertile that when she once begins to lay her eggs she lays them at the rate of sixty a minute without stopping, that is, eighty thousand a day. Her body is so full of eggs that she is swollen to an enormous size, and the workers keep her confined within the walls of her chamber, the door of which is big enough for them to pass through with the eggs, but far too small for the queen to pass through. In this chamber the queen is waited on carefully by a body of nurses, some of which provide her with food, while the others carry off the eggs to the nursery as fast as they are laid. The workers have not only to provide food for themselves and the king and queen, but also for the soldiers, which mount guard and defend the community from the attacks of other insects, and also for the larvæ and young ants before their jaws are strong enough to gnaw timber for themselves; but by dint of steady industry they do all this, and always have a store of food laid up in the granaries for feeding the young. This stored food is finely divided wood and bark which is most probably rendered fit for the young by the chemical action of the saliva of the workers in preparing it for them. The queen herself is so occupied with laving eggs that she can give no care to her offspring, and probably has no affection for them; but the workers, although

they have no young themselves, show all a parent's care for the young of the community. The soldiers are to some extent a privileged class, as they have not to provide food; but they are few in proportion to the workers, and so are not such a burthen to the community as the standing armies of some Christian nations. They are larger and have very much larger heads than the workers. A white ant settlement is, in fact, a real commune, in which all classes work for the general good, devoting the most of their labor to the care and bringing up of the young.

The world's work of the white ants is to keep timber from decaying and going back to the air, and to convert it into an enduring forest mould fitted for the support of a higher class of vegetation than that which drew it from the air.

This, then, is the task allotted to the white ants. They seize the forest trees as they die, devour them, and convert their substance into plant food with which they enrich the forest floor, preparing it for the time when man shall come and clear the forest, and raise food crops in its fertile soil. All this is done in the course of the daily task of providing food for the support of their own community, in utter unconsciousness of the importance of the world's work they are doing.

What a lesson of encouragement for people who are discontented with the daily round of common duties, and pining to distinguish themselves by some great work which shall benefit humanity for all future ages. What lot could be more seemingly humble than the white ant's? What labors less calculated to favor the support of higher life types and influence the progress of future ages, than the simple round of a white ant's daily duty? And yet, all unconsciously, the white ants have done more important world's work than the lordly elephant.

CHARLEY'S WONDERFUL JOURNEYS.

JOURNEY VIII.

"THERE goes another of those dreadful boys," said the wood thrush.
"I wonder how many poor birds he has killed!"

"I never killed a bird," said Charley.

"Nor robbed a nest?" queried the wood thrush.

"Certainly not," replied Charley. "I wouldn't do such a thing; I am a member of the Audubon Society."

"That's true, said the wood thrush, "or you would not understand us. Then I suppose you are going to the funeral?"

"Yes, I should like to go," said Charley.
"When does it start?"

"It will start directly," said the wood thrush, "I see the mourners are nearly all assembled. Poor little Bobolink," continued he, "yesterday so full of beauty and life and song, to-day a headless, shattered carcass, his feathers and skin stripped off him to adorn the bonnet of some heartless woman!"

In a little pine clearing in the woods the birds were assembled from all the four quarters of the earth, and there in the midst of them on a deftly constructed stretcher, tenderly pillowed with soft green moss, lay all that remained of poor little Bobolink.

The birds as they arrived cast a pitying glance upon the dead, and then stood aside in solemn silence, leaving a clear space around the stretcher.

Presently the wild goose stepped into the open space with a slow and stately tread; his manner was dignified and impressive, and the whole assemblage stood hushed, with bowed heads.

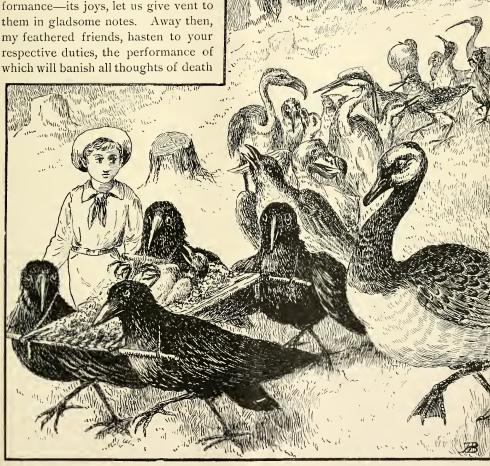
"We are assembled,my feathered friends," he began, "to perform the last sad offices for a departed brother, another victim of woman's pitiless vanity and man's wanton lust of blood, or it may be lust of gold. Stricken down in the vigor of youth and health, but not until his heart had been wrung by witnessing the wanton massacre of his tender partner, and later the ruthless robbery of his motherless young from the nest, he had his share of life's sorrows. He is now at rest. For us remains the sad task of following the body to its final resting place."

As he ceased a dead and solemn stillness fell on the assembled birds. moment the pall-bearers, four crows, raised the stretcher, and at the first step the silence was broken, the woodlands rang again with the rich, full notes of the mockingbird as he recited the requiem for the dead. He told how Bobolink and his wife began their courtship when they came north in the spring, and how they built their nest, and Mrs. Bobolink stayed at home and brooded the eggs while Bobolink foraged for food, and how at last when the young were hatched, Mamma Bobolink had to forage for them too, and how one day she had been shot, and then Bobolink had to do all the foraging himself, while the young ones were growing every day and able to eat more and more, and how, when Bobolink was almost worn out, he came home one day to find the nest gone. Then his heart almost broke and he poured out his sorrow in a wild plaintive melody which attracted a gunner to the spot and cost poor Bobolink his life as the final act of the sad tragedy.

At length they reached the last resting place, an open field at the edge of the woods, all dotted with curious shaped little mounds, with feathers stuck in them. The crows deposited their burthen on a little clear space, the procession broke up, and all the birds gathered round. Then the

wild goose stepped forward and addressed the assemblage:

"Our task is done," said he. "It was good for us to be here; good to be reminded of the uncertainty of life; good to realize that sooner or later we too must all depart to the unknown realms beyond, but our duty done there is no need to linger. Life has its duties—let us hasten to their performance—its joys, let us give vent to them in gladsome notes. Away then, my feathered friends, hasten to your respective duties, the performance of which will banish all thoughts of death



and sorrow, and bring its reward in the calm enjoyment which springs from the consciousness of duty done. Away, brethren, labor and love and song are the lot of the living."

As he ceased he ran a step forward, spread his broad wings, and soared aloft.

All the birds followed his example. For a moment nothing was heard but the flapping of wings. The next moment woodland and meadow resounded with the joyous notes of all the feathered tribes, vying with each other in song, while from high overhead fell the pleasing although less musical note

of the wild goose, the duck, the crane and innumerable waterfowl, winging their way to the marshy shores of some distant lake.

Charley was left alone in the solitary graveyard, and as his eye fell on the spot where the dead Bobolink had rested he saw that a new mound had sprung up, and that what looked like the ghost of a bobolink was chained to it in a position that suggested the most horrible tortures. He advanced nervously for a clear view, and found that the mound was a woman's hat, and that what he had mistaken for the ghost of the bobolink was his stuffed skin and feathers distorted into an excruciating shape and the once beautiful head grinning as if still in pain.

Then Charley saw that all the mounds were hats of various shapes, and presently

they began to move, passing and repassing in long procession; and now Charley found that he was in the city and looking down on the moving crowd of bonnets from an upper window, and as he saw the mangled remains of birds of every clime and color pass and repass, and among them, oh so many of those he had seen at the funeral, the sickening dread came over him that all bird life was banished from the world. "Gone, all gone," he muttered mournfully.

A loud caw close to his ear startled him from his revery and from his sleep too, and springing up in bed he saw the crow fly from his window sill, and opening his window he heard the notes of a bobolink flooding the morning air with his rich and tuneful minstrelsy as he hovered over his nest in the meadow.

C. F. AMERY.

BLUEBIRD DICK.

I.—"BIRDS OF A FEATHER."

OBOLINK stood by the library win-D dow with the end of his nose pressed flat upon the glass. Ten seconds stood he thus; then drawing back, he clapped his hands softly. "Oh, papa! here's a bluebird." Now, the birds had been away for five long months, and here they were again, away back from the sunny South and the land of flowers. What if the snow still lingered on our hillside; what if the wind blew cold and those flying clouds hinted darkly of a coming storm? Did not the presence of this bonnie bird mean something better? Would we not soon have pleasant, sunny days, and our woods and meadows glow in all their wild flower beauty? Why shouldn't little hands (and big ones too) be clapped?

Outdoors Bluebird Dick glanced sharply at the window and then flew to the walnut tree. "It's all right Dot, but we'll have to stay indoors, for another storm's a-brewing." "Oh, this box is very comfortable;

and now, Dick"-as they snuggled up-"you can tell me of this place, of your friends and enemies. Are you sure that's the right family?" "No doubt of it, Dot; those faces at the window are just the same; I saw the same yellow dog in the yard yesterday and the same big Toppy duck. There's the old stump where Oakie flying squirrel lives with his chums Brownie and Midget. These are friends, and the only enemies I know are those pesky English sparrows in the elm tree vonder." "Oh, I know the little wretches," cried Dot; "they have plain brown feathers and can't sing anything like their American cousins. When not chasing other birds they are spatting among themselves or rolling about in the dirt. They don't build nests at all; they just build little havstacks." "Ah, you had 'em there, Dot; and yet we are indebted to those very enemies. For when papa and mamma decided to build last spring, that red box in the south gable suited them exactly. They were hardly settled down when the sparrows

stormed the place, and fight as papa would (and he did fight hard) the pirates forced themout. Bobolink seemed troubled about it and said he'd have his papa fix up another box. Sure enough he did, and we are in it now. Much obliged, but you had better not disturb us here," muttered Dick, as he whetted his beak on the floor and looked very cross indeed at the elm tree. "Won't the boys throw stones at us?" "Not now; they did once, I believe, but their mamma told them it was wrong, and if not scared too often we'd come back and build again. Now there she spoke the truth, Dot; for down South last week, Robin told me he'd be along shortly and build a big mud nest in the same old apple tree, and Jenny Wren warned me to keep away from her box by the kitchen. Yes, they'll be here with many others, and I am very much mistaken if any other half acre will have as much bird music." "Don't the folks fire off those big horrid guns and things?" shuddered Dot. "Nary a bang, Dot, except on the Fourth of July; then watch out. you know that's only for one day." Dick rattled on, and together they laid plans for the morrow. While thus engaged the storm passed over; the day wore down, and evening with bed time arrived; then the birds carefully dressed their feathers. About the same time a certain little boy next door carelessly undressed himself and hopped into bed. Then each bird drew up a leg well under its body and each head was snugly hid beneath a blue wing. Then the boy drew up both legs, and a warm blanket was tucked around the little white shoulders. and then Bobolink and Dick and Dot alike were soon wrapped in soft slumber.

11.—"GOD SHIELD YE, HERALDS OF THE SPRING."

Morning again; and how can it be described, and the days and times that followed. How balmy the south wind was, and how quickly the snow melted away in

the warm sunshine. How the days grew long and milder. How the wee frogs joyously piped of coming spring, and how the trees and fields donned their green reception robes, which proved that spring had really come. How Robin kept his word and Jennie took possession of her old quarters. How the wood sparrow, blackbird, lark, catbird and thrush, with others, drifted back on this springtide, and the place was flooded with melody, then Dick's prophecy was fulfilled, though Dick was with the dead. How busy Dot was in those earlier days, scarcely taking time to eat or think of love; and how carefully she placed each twig of the nest just so; how Inspector Dick approved the work and most heartily indorsed her finishing touch of four blue eggs. What jolly times Dick had bathing in the swamp; timidly at first, tossing a few drops of water about; then wading deeper, he'd dive and flap his wings and splash like Toppy in the pond. Then at nightfall how Oakie with his comrades sallied forth to have their fun: then Brownie and Midget, slyly creeping up, would touch each other's noses and scamper off like mad. Then the quiet sleepers would be startled by a thud upon the roof, and the sudden vision of two great, round eyes at the door: but reassured by the merry chirp of Oakie, "Halloo! Dick," who would then as quickly vanish. Now firmly standing on the roof, with fore paws doubled in, he'd stretch forward and back like some huge measuring worm; then with a downward leap and legs outspread, he sailed away on the moonlight.

111.—"O WONDROUS BIRTH!"

Dot's breakfast had been served and servant Dick adjourned to the swamp. An extra good bath, then back to the nest, and what do you think he found? One egg was missing, but in its place lay a tiny baby bluebird! Lying there with upstretched neck and mouth wide open, a funny, downy little jack-in-a-box! Oh, my! wasn't Dick glad?

He rushed out and hopped sideways along a limb, then sideways back again. Then the mud house proprietor was notified. "Chick! chick! chick!" shouted Robin rapidly, which plainly meant, "Hurrah, old boy, and my kind regards to Mrs. Dot." Then he carried the news to Jennie. Suddenly he remembered that baby's mouth was open and that it must be awfully hungry.

Hard by on a lilac leaf pensively sat a big, fat fly. All at once, in the twinkling of an eye, its front legs were twirled together; then it turned a semi-handspring and cleverly balanced, while the hindlegs were slowly twisted over and down its back.

Tradition holds that the wild swan "sings melodiously when near about expiring," and the "death song of the Cherokee warrior has long since been recorded;" but the agile fly, in this last great act, outshone them all!

"Isn't it a whopper," spluttered Dick, marching proudly up with his mouth stuffed full of baby's dinner, and that dinner half as big as baby itself! "Go away, you foolish bird," laughed Dot; "this little chap doesn't need a bluebottle yet, and your wet feathers might give him the colic, you know." Dick stared ruefully a moment, but goodnaturedly swallowed the fly and his disappointment. "Say, Dot, what do you think of naming the baby Jennie?" "Oh, Jennie sounds pretty nice, but I rather fancy the name of Robin; don't you Dick?" Dick stared somewhat ruefully again and hopped out. "Now, if Oakie only knew this," he thought, "I'd feel tip-top."

IV.—WHOM THE GODS WOULD DESTROY THEY FIRST MAKE—ANGRY.

Exciting noon had passed away; then evening quietly came, with Dick subdued though happy. Full twenty times he had rapped on the old stump; twenty times he softly warbled there, but Oakie never wakened. And now the blazing sun went down and tinted the clouds with Dick's own

lovely colors. Then Oakie yawned and stretched one leg, but lazily pillowed his head again on Brownie's shoulder. An hour dragged by, then phantom lights and shadows struggled for the mastery, and while the lark yet plaintively mourned of parting day, the guttural twang of a great frog foretold the reign of night. Then Dick could wait no longer.

"Oakie! Oak" -- but what meant that cry of distress? One startled glance and Dick was speeding homeward. Now hurry, Dick, that swarm of hornets in your house you'll find no common foes. Fly faster, Dick! a single venomed sting would-and Dick swooped down to the rescue. Alas! too late for rescue now. Poor Dot lay slowly gasping out her life, but faithful to the last, her upraised wings still shielded nest and babe. Swelling with rage and grief, Dick turned for revenge. At every stroke of that sharp beak an enemy fell, and with alternate wings he dashed them right and left; but for every one thus stricken a dozen filled its place. They buzzed fiercely round his head, crawled up and bit and crippled his wings-and now he fought for his own life. Inch by inch they drove him back from the loved ones; out of his own door, and further yet, until he fell fluttering to the ground, and even then they darted down and stung him again and again. One faint struggle, and those bruised and blinded eyes were strained wistfully upward; then the wounded head fell back, and when the moon looked down upon that miniature battlefield, the brave little broken heart beneath its coat of blue had stopped beating altogether.

* * * * * *

Now, little folks, it is true that the hornets killed the bluebirds; Ralph and Bobolink know, and their playmates know it's true. It is true that birds have hearts and brains; they have natural affection and can suffer pain. Do you call those insects cruel?

Wait a moment. While playing near the swamp one evening, three careless lads battered down a hornets' nest; some of the insects were slain, and the remainder, angered of course, and homeless, sought protection from the chilling night dews. The first shelter found was the home of Bluebird Dick; and then they took by force what had been taken from them by force. Boys, don't kill the birds; be careful how you injure any of God's little creatures. Some day, perhaps, you will read about the Ancient Mariner; about this man who, once

upon a time, while young and strong, shot a sea bird called the albatross, and how very, very sorry he was afterward; that after many years, when his steps were feeble and his hair turned white, he could not forget about the death of that poor bird. How he stopped every person that he met, and told them of the cruel deed, and bade them heed, and told them finally that none could pray better or more earnestly than those who best loved our birds and animals.

"For the dear God who loveth us, He made and loveth all."

BIRD HISTORIES.

THE "BIRD OF JOVE."

OVE was Jupiter, the supreme god in Roman mythology, the Zeus of the Greeks. The eagle was sacred to this heathen deity, and was also called the "Bird of Heaven." Many ancient nations venerated some particular bird, and many modern nations, the United States among others, accept the lordly eagle as their national emblem. Although native in the free American wilds, we have stolen, or borrowed him, to speak more politely, as a national emblem, from Rome and France. He is our sacred bird. He flies higher over desert and fertile prairie, among craggy or evergreen mountains, than any other feathered creature, although he is not so large as the great condor of the Andes. Naturalists tell us that his plumage is of varied tawny, dull and white hues, and only his legs are yellow; so are some chickens'. Then why is the proud monarch—"king of birds"-named also the "golden eagle"? Of course he has some cousins (species) who are not quite so grand as himself.

In various regions of the earth eagles are regarded as "terrible," and dangerous enemies to man and beast. Young children and lambs have been carried away alive in the talons of these powerful birds to their eyries upon inaccessible cliffs. There

upon a rock outside the nest, their doom is to be torn in pieces for eaglets' food.

Their Creator and ours formed many another beautiful and more delicate bird, for song, happiness and rainbow radiance, not for heartless or ignorant women to wear murderously, as a sign of their vanity; and why he created any birds of prey we need not ask, for even if we do not know we may be sure that they are necessary to the general welfare.

A few years ago, not far from our chief American city, New York, two boys, seven and five years of age, were playing in a field, when suddenly a great eagle came down, as if from a world above and tried to take up the larger boy in his claws. He did not succeed at first, and made another trial; the boy caught up a sickle and defended himself. The audacious bird was wounded under one wing, and gave up the battle. He fell over and died. He was doubtless weakened by hunger, else a blow from his strong beak might have killed the brave boy.

There was once a law of the Orkney Islands to reward any person who killed an eagle, with a domestic fowl from the flock of every family within the parish.

Eagles nest among the high rocks of

many groups of wild ocean islands. They seem to care little whether the regions they haunt are warm or cold; and they are said particularly to like to be monarchs of desert uninhabited regions.

You may have read many wonderful stories of eagles. I have a true one to relate, which some of the young readers of the Audubon may not have heard. And many older readers do not know that the child's magazine called the *Little Corporal* was established and gained large success through an "Eagle Army" of children, as they were named, because they each paid ten cents for a colored photograph of "Old Abe," the "War Eagle" of the Eighth Wisconsin Regiment of Volunteers. Yes, it was a live eagle, this "Old Abe," and he

was carried three years in the war of the Union, through all the dangers of camp and battle, by soldiers in that regiment. And he lived some years afterward, tenderly supported in the State House Park at Madison, Wisconsin.

I saw him once in a procession at Chicago, perched high over a wagon, with his white beard and folded wings, looking in wise, solemn attitude as if he would rebuke the whole great land of freedom that ever it had warred against itself. Old Abe Eagle at that time was sacredly guarded, but he was in no danger of trying his wings for a wide excursion; he had adopted civilized life, and felt free enough among the folds of the flag of stars, exhibiting himself to thousands on the streets of a great city.

EMILY THACHER BENNETT.

UNUSUAL NESTING SITES.

THE following observations on some unusual nesting sites from the Natural History columns of *Forest and Stream* are from a paper read by Walter E. Bryant before the California Academy of Sciences:

The entire material, with one exception, which comprises the present paper, has been received in brief notes or dictations from Messrs. W. Otto Emerson, A. M. Ingersoll and Chas. W. Knox, leaving the part taken by the author simply that of editor and compiler. The initials following the cases cited are those of the observers, to whom my thanks are due for communicating their interesting field observations.

Arkansas Flycatcher — Tyrannus verticalis.— A nest was found built upon a fence-post more than half a mile from the nearest tree. It was secured from observation on one side by a board nailed to the post and projecting above it. (A. M. I.)

Black Phœbe—Sayornis nigricans.—A pair built for two consecutive years in a well four feet below the surface. The first year a second nest was built after the first had been taken. (W. O. E.)

Baird's Flycatcher—Epidonax difficilis.—A nest was built at the bottom of a hole five inches deep, made by a red-shafted flicker in a live oak. (A.M.I.)

Blue-fronted Jay-Cyanocitta stelleri frontalis.-A

strange departure from the usual habits of jays was noticed in Placer county, Cal., where they had persisted in building within the snowsheds in spite of the noise and smoke of passing trains. The destruction of their nests by the men employed on the water train, which makes two trips a week through the sheds during the summer, sprinkling the woodwork and tearing down the nests of jays and robins with a hook attached to a pole, seemed not to discourage them. So accustomed do the jays become to the passing of trains, that they will often remain on their nests undisturbed.

In one season more than two hundred nests of jays and robins were destroyed, so the trainmen say, between Cisco and Summit, a distance of thirteen miles. Some of the nests were but partially built, others contained eggs; these latter ones having probably been overlooked on previous trips.

The nesting of the jays within the snowsheds is, so Mr. Ingersoll supposes, to avoid the persecution of squirrels. None, he thinks, however, succeed in rearing a brood, for of more than thirty nests which he found, nearly all were uncompleted. (A. M. I.)

American Goldfinch—Spinus tristis.—In 1884 a grove of young willows that had been occupied the previous season by a colony of tricolored blackbirds was found deserted by them. Many of the blackbirds' nests still remained in forks of the willows

from four to ten feet above the marsh. Six of these old nests were in possession of American goldfinches. The present tenants had loosely filled the nest about half full of cat-tail down and had formed only a slight hollow for the nest proper. Some were found with eggs and in others there were "birds in last year's nests." (A. M. I.)

Samuel's Song Sparrow—Melospiza fasciata samuelis.—A nest containing three eggs was found in a round oyster can which had lodged sideways among some driftwood in a willow tree. (W. O. E.)

California Towhee—Pipilo fuscus crissalis.—A pair constructed a nest in a five-gallon kerosene oilcan that lay on its side in a shallow ditch. Part of one end of the can had been cut open, giving access to the birds. (W. O. E.)

Barn Swallow—Chelidon erythrogaster.—A kind-hearted postmaster in the country nailed a shelf-like board against the porch above the entrance to his office, intending to give the crimson house finches a place to build. A pair of barn swallows took possession of this arrangement and built on top of it a nest composed of straw and feathers. This is the only instance I have known where this species used no mud in the composition of its nest. The position of this nest was less remarkable than the peculiarity of its structure. (A: M. I.)

A barn swallow's nest was built a few feet below

the surface of a well which was in daily use, water being raised by means of a windlass and bucket. The weight of the growing young became so great that it broke the nest from the moist ground, and the young were drowned. A second nest was speedily begun upon a shelf of rock, nearly thirty feet below the surface, and not high above the water. Unfortunately, the result of this second attempt was not learned, for it would be exceedingly interesting to know how, if at all, the young were brought to the surface from so great a depth. (C. W. K.)

Tree Swallow—*Tachycineta bicolor*.—A few years ago I found a nest with young in a crevice under the projecting and decayed deck of a lumber lighter moored in Oakland Harbor.

Hutton's Vireo—Vireo huttoni.—A pair of vireos built this year in the outer branches of a live oak, only a few feet above the exhaust pipe from a steam pump, where at times they were compelled to suspend work, owing to the dense vapor which enveloped them. Four eggs were laid in this nest. (C. W. K.)

Long-billed Marsh Wren—Cistothorus palustris.

—A conspicuous nest, containing eggs, was woven among the almost leafless branches of a young willow, five feet above a fresh water marsh. The false nests were built as usual, but in the coarse grass near by. (A. M. I.)

BIRDS IN DISGUISE.

Their names are given in the form of anagrams. The anagrams contain the letters which make up the names. By transposing the letters of each anagram, patient and ingenious readers of the Audubon Magazine may form the name of the bird it contains. Take for example No. 21, Pawling. Transpose the letters and we find Lapwing. In the same manner each of the others may be discovered.

For the first five perfect solutions of the list sent in by subscribers to the magazine five silver Audubon badges will be sent, one to each one who solves the puzzles. The result will be announced in our August number.

Directions. Number each name to correspond with the anagram. Send the list

with your full name and address to the Editor of the Audubon Magazine, No. 318 Broadway, New York.

- Granite den soup.
 Go mind brick.
 Dryer birch.
- 3. T my wise finch.4. Blow direly.21. Pawling.22. Try! Gap!
- Blow direly.
 Try! Gap! Roar!
 Retort riven hang red 23. Whirlpool Pi W.
- 6. Do keep crow. 24. Alan's children.
- 7. Drink big. 25. Sabre! Rend! Obit! R.
- S. Our sea eggs.9. Boil knob.26. Who bit B. E.?27. Pain's perd.
- 10. Rush the mirth. 23. Girls tan.
- 11. R. dug moonvine.12. Nib's word.29. Grin him dumb!30. Long brace O sea!
- 12. Nibs word.
 30. Long brace O sea
 13. Her rain pie.
 31. Reduce kid.
- 14. U. go defer surf. 32. Heed larks.
- 15. Magpi rant. 33. Bask, Radical Negro!
- 16. A Turk age.17. Sling in sheep.34. Near crock.35. Shirt Co.
- 18. Grow, parsons! 36. Lub Bride.

THE AUDUBON NOTE BOOK.

MEMBERSHIP RETURNS.

THE registered membership of the Society on April 30, 1888, was 45,651, showing an increase of 497 members during the month, drawn from the following sources:

New York	129	Illinois	16
Massachusetts	55	Iowa	7
Pennsylvania	103	Minnesota	I
New Jersey	10	Missouri	2
Vermont	6	Mississippi	4
New Hampshire	13	Kentucky	I
Connecticut	4 I	Texas	19
Rhode Island	1	North Carolina	7
Maine	16	Florida	6
Indiana	I	West Virginia	30
Ohio	15	Canada	9
Michigan	5		
			497

WARREN'S LEDGER.

C. F. AMERY, General Secretary.

THE single sheet circular bearing this title, and described by its publisher as "a periodical devoted to natural history," is an extraordinary evidence of the perversity of moral nature which will sometimes prompt seemingly shrewd people to make unheard of sacrifices to earn a little money dishonestly, when it would be much more easy to earn it honestly.

The Ledger publishes a list of birds which it professes to want at prices ranging from one to ten cents per skin. By offering five or six dollars for rare birds and as much as twenty-five dollars for a pied duck it seeks to impress country boys with the idea that they can make a great deal of money by procuring skins for the enterprising Ledger proprietor. Indeed he assures them that every bird in their vicinity has a market value, and that they can make a very good living shooting for him.

But Mr. Warren of the Ledger evidently does not want bird skins, he lays it down distinctly that he will not buy them from any one who is not a regular subscriber to his circular, which he has the impudence to demand fifty cents a year for, coupled with the further condition that his preserving cotton must be used for stuffing the birds. This, too, costs fifty cents a package, weight not specified. What Mr. Warren wants is to sell his circulars and cotton.

But the character of the circular is best indicated by the fact that it offers from one to ten cents a skin for a long list of birds protected by law. It is thus technically an incentive to the commission of an offense, but hardly a very strong one. There are possibly boys, and men too, who would kill warblers and finches in defiance of the law, and perhaps skin and stuff them for a cent apiece, but Mr. Warren

must be possessed of an unusual amount of persuasive eloquence if he can induce this or any class of persons to subscribe fifty cents for his Ledger.

The poor birds have many enemies, but Warren's Ledger is not likely to prove so formidable a one as some of our friends have supposed.

CROW AND ANTI-CROW.

ONE of the greatest crows' roosts ever known in northern New Jersey has been formed in a piece of woods near Deckertown, Sussex county. Many thousands of the birds occupy the trees, and their cries in the morning when leaving on their foraging expeditions, and on returning to the roost at night, can be heard for two miles. The farmers living in the vicinity, who believe that the crow is a destructive enemy of theirs, take advantage of their presence in such great numbers to wage a war of extermination on them, and make raids upon the roost nightly, shooting and clubbing hundreds of crows to death. The hunters carry torches, and the startled birds fly about bewildered, uttering deafening cries of terror which, added to the banging of the guns and the shouts of the hunters, make a regular pandemonium of the woods at night. These raids are hotly opposed by some of the farmers of the vicinity, who believe the crow is a friend instead of an enemy to the farmer; but the anti-crow party is the largest, and at last accounts this slaughter of the crows was going on nightly, and will be continued until the roost is broken up.-Exchange.

NO MORE BIRDS IN BONNETS.

LADIES are no longer to wear birds in their bonnets and hats. Thus it has been decreed by fashion. The benevolent edict comes just in time to save the last remaining members of the race of humming birds and birds of paradise. The great forests of India, Brazil, and the banks of the Mississippi have been ransacked and have yielded up their treasures of winged jewelry to adorn the feminine headgear. Now at last there is to be a truce to the massacre, and the pretty denizens of the woods may sing and fly awhile in peace. To estimate the extent of slaughter perpetrated for the sake of womankind's adornment we may take the statement of a London dealer, who admits that last year he sold 2,000,000 small birds of every possible kind and color, from the soft gray of the wood pigeon to the gem-like splendor of the tropical bird. Even the friendly robin has been immolated to adorn the fashionable bonnet. - London Queen.

AMONG THE BIRDS IN TEXAS.

Editor Audubon Magazine:

As we live in the land of birds it seems fit that we should be interested in their protection. Our home is embowered amid large spreading oaks, cedars and chinas, besides mulberries (now ripe) which seems to draw all the feathered tribe, and their songs make the air ring with their cheering music, besides apple, peach, pear and plum, all set off with flowers of many hues in front, and ivies and geraniums filling the house with their pleasant perfume. I wish you people, pent up in your great city, could hear and see for a day the birds and their music, which fills the air with song. We have two martin houses and about tweny-five noisy tenants, which chirp, twitter and sing all day long; jays in numbers, bluebirds, bee martins, redbirds, thrushes, wrens, tomtits, snowbirds, blackbirds, yellowhammers, sapsuckers, woodpeckers and many others, all singing at once; but last and loudest and longest and sweetest, as the leader of the band, is our own mockingbird, and every one without regard to the other, singing as if the exhibition depended on himself. And when night comes on, the disconsolate whippoorwill puts in his or her sad refrain, rendered more discordant by the hooting of the swamp owl and the chilling, shivering notes of the screech owl and rumbling of the swallows or chimney sweeps, which well nigh takes the poetry out of the whole tribe, and we feel like turning loose the destroying urchin to quell the riot; but now from his dreamy perch the mocking bird trills, carols, and warbles forth his sweet notes that lull us to sleep, and we thank the Creator for the lovely songsters that drive away cternal silence. TULLY CHOICE.

KILGORE, Texas, May 10.

SEALS, SEA LIONS, SEA GULLS.

Editor Audubon Magazine:

Have just read an item—can't such fiendishness be stopped by somebody?—"Fishermen in Shinnecock Bay stuff small fish with arsenic or strychnine in order to poison the sea gulls, which they sell to feather dealers," and San Francisco fishermen say the sea lions and seals must be made away with because they eat up 44,000 tons of fish every year.

SAN FRANCISCO.

[Our correspondent is very indignant, and justly so, at the wanton destruction of gulls for the sake of their feathers, and scarcely less indignant at the proposed eradication of the seals and sea lions of the Pacific Coast on the plea that they make away with forty-four thousand tons of fish every year; but we must draw a great distinction between the motives

which prompt to action in the two cases. In the first case we have to do with wanton destruction to gratify vanity in defiance of the generally recognized fact that birds are in some way necessary to human wellbeing. Here the moral nature is at fault. In the second case the proposal to kill off the seals and sea lions is justified by the assumption that the measure is necessary or at least conducive to human wellbeing by increasing our food supply. Here it is only the head that is at fault, the fishermen having calculated or got hold of the calculation, on perhaps respectable authority, that the seals and sea lions consume forty or fifty thousand tons of fish a year on the Californian coast, conclude very naturally that the supply of fish available for the fisherman is correspondingly reduced. This hasty conclusion might have some justification if all the fish taken by the seals and sea lions were herbivorous, but as nearly all of them are carnivorous, the calculation requires that against the weight of fish consumed by the seals and sea lions we should set off first the weight which these fish would collectively have consumed had they escaped the seals' and sea lions' jaws, and if this does not balance the account in favor of the seals, we should take into calculation the additional fact that they prey only on fish which in themselves are substantial mouthfuls, while the daintier fish prey in great part upon shoals of young fish requiring a great number for a meal. Attaching due weight to these considerations, there is no reason whatever to suppose that the presence of the seals and sea lions tend to diminish the available stock of fish in the ocean; on the contrary, it is reasonably assumable that their presence may conduce to the maintenance of a liberal supply. As we have argued before in this magazine, there may be some errors in the plan of creation, but they are nothing in comparison with the errors which man falls into in his efforts to straighten things out.]

THE MOCKINGBIRD AND THE SPARROW.

An observant gentleman of our city says he thinks that he hears fewer of the South's greatest songsters, the mockingbirds, now warbling than ever before, and believes that the feathered singers are abandoning this section. The only way he can account for their disappearance is the advent in this section of those little pests, the English sparrows. They are turbulent and pugnacious little birds, and all other birds which do not possess the same characteristics make haste to 'abandon their favorite retreats and leave the sparrows in possession of the field. It would be a real pity indeed if the South's favorite birds should be forced out or exterminated by the English sparrow.—Natchez (Miss.) Democrat, May 5.

EMINENT PEOPLE ON BIRD PROTECTION.

OAK KNOLL, Danvers, Mass., and mo., 20, 1886.

Editor Forest and Stream:

I heartily approve of the proposed AUDUEON SO-CIETY. We are in a way to destroy both our forests and our birds. A society for the preservation of the latter has long been needed, and I hope it is not too late for the accomplishment of its objects.

I could almost wish that the shooters of the birds, the taxidermists who prepare their skins, and the fashionable wearers of their feathers might share the penalty which was visited upon the Ancient Mariner who shot the Albatross. Thy friend,

JOHN G. WHITTIER.

BROOKLYN, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I am heartily in sympathy with your purposes for the protection of birds, and should be glad to contribute any influence that I can to that end.

If there were no purchasers there would be no demand, and no reason for slaughtering these winged gems. But as only women create a demand, it rests upon them to stay this wanton destruction. I am sure that it is only necessary to bring before American women the cruelty of this "slaughter of the innocents" that fashion is carrying on, to secure a renunciation of this ornament and the salvation of birds.

On this subject the kind feelings, the taste, and æsthetic sympathy of the whole community are on your side, and if you persevere you will surely win.

HENRY WARD BEECHER.

CORNWALL-ON-HUDSON, N. Y., Feb. 22, 1886.

Editor Forest and Stream;

You have indeed my hearty sympathy in every effort to prevent the slaughter of my innocent little neighbors and friends, the birds. In the destruction of forests and birds, the people of this land are inviting very great evils and inflicting wrongs on posterity which scarcely can be measured. The press should render it impossibe for women to sin thoughtlessly and ignorantly in demanding little birds for their adornment. The evil should be brought home so fully to the knowledge of all, that the continued wearing of our useful little birds should become the badge and indication of a callous, vulgar nature. You are doing a humane and patriotic work in exciting public aversion to one of the most cruel and stupid wrongs of the age.

Respectfully yours,

EDWARD P. ROE.

West Park, N. Y., Feb. 20, 1886. Editor Forest and Stream:

I scarcely need assure you that your undertaking to form a society for the protection of our wild birds against the ravages of the milliners and the sham scientific collectors has my warmest sympathy and approval. It is a barbarous taste which prompts our women and girls to appear upon the street with their head gear adorned with the scalps of our songsters; and it is mere vanity and affectation which prompts so many persons to make up cabinets of the nests and eggs of the same. The destruction of our birds from their natural enemies is immense, and this craze of the collectors, and folly of the milliners and their customers in addition, threatens their serious

I hope you may succeed in creating so strong a public sentiment upon the subject that the collectors of skins and eggs for the unworthy purposes of fashion or to indulge the vanity of pseudo-naturalists may suddenly find their occupation gone.

Please add my name to the list of the members of the AUDUBON SOCIETY. Very sincerely,

JOHN BURROUGHS.

160 W. 59TH STREET, NEW YORK, Feb. 20, 1886.

Editor Forest and Stream:

diminution.

No one who will take the trouble to give the matter a few moments' serious consideration can be in doubt, I think, as to the wisdom of organizing the AUDUDON SOCIETY, and I am thankful that such a step is contemplated. There is an element of savagery in the use of birds for personal decoration, which is in grotesque contrast with our boasts of civilization. But even the savage stops short, as a rule, with the feathers. It is only Christian people who think it worth while to butcher a whole bird to adorn their head gear. I am sure, however, that this is largely from that unreflecting habit which is a leading vice in people who follow the fashions. But it is a vice; as Hood sang, when he wrote—

For evil is wrought
By want of thought
As well as by want of heart.

If the Audubon Society can teach men, and especially women, to think on this subject, half of the battle will have been won.

HENRY C. POTTER.

Andover, Mass., Feb. 21, 1886.

Editor Forest and Stream:

I am in earnest and indignant sympathy with the motive of any society organized to prevent the murder of birds for decorative purposes.

E. S. PHELPS.





THE CROW.

THE AUDUBON MAGAZINE.

Vol. II. JULY, 1888. No. 6.

THE CROW.

THE Crow was long considered a bird I of ill omen, and its reputation to-day suffers from this ancient superstition. Among the thoughtless and ignorant this bird has few friends, but its enemies are The farmer hates it because he supposes that it does great damage to his crops in springtime, plucking up the young grain in the fields to devour the sprouting seed: later in the season he accuses it of destroying the eggs of the hens and turkeys which have "stolen" their nests and are sitting in the brush heaps and fence corners and on the edges of the wood at a distance from the house; and after the poultry have hatched out their young the Crow is credited with appropriating to his own use a part of the young chickens and ducks which so mysteriously disappear from the farm. No doubt in all these accusations there is some measure of justice; unquestionably the Crow does considerable damage to the farmer. But there is another side to all this. If the Crow does harm he also does good. Who so useful as the Crow in finding out and devouring the cutworm which destroys the tender corn when it is a few inches high, eating through the succulent stalks, and carrying destruction wherever it goes? Who so keen and methodical as the Crow in his search for grubs in early spring over the sear, brown fields which the grass has not yet begun to brighten? The farmer may not know that snugly buried among the grass roots are the pupe of many noxious insects, which if permitted to come to maturity would destroy the roots of the grass and other plants, doing incalculable damage; but the Crow knows that these creatures are there, and he knows, too, that they make very good eating, and so with half a dozen of his glossy-coated companions he stalks solemnly about the field, looking into all the places where it seems as if insects might be found, and sometimes with his stout bill sinking a prospect hole in the ground in an especially likely looking spot. This system of forage the Crow keeps up for a good part of the year. Woc to the field mice if he finds their nest snugly concealed at the root of some old stump, under dense tussock, or among the sprouts of a bramble bush where last year's leaves lie thick upon the ground. A stroke or two of his strong beak kills the parent mice, the nest is torn to pieces, and the young and old are carried off to feed his ravenous brood.

The crimes of the Crow consist in his injury to very young crops, and his destruction of eggs and young of poultry and of insect-eating birds. These last are especially exposed to his attacks, and in a season the number destroyed by a single Crow must be very considerable. On the other hand, this bird devours vast numbers of worms, caterpillars, beetles, mice, shrews and

moles, which but for his efficient and never ceasing pursuit would live and reproduce their kind to the enormous injury of the agriculturist. It would be hard to say whether the Crow does most harm or good. The question has been many times ably debated by those in favor of and those opposed to the bird, but it has never been decided, and perhaps never will be. We strongly incline to the belief that he is a benefit rather than an injury to the farmer, but this view is quite opposed to the general opinion held of him.

The Crow has a wide range, inhabiting almost the entire continent of North America, except the Arctic regions. Crows of Florida and California are slightly different from those of Eastern North America, but these differences are too slight to be noticed except by the practiced ornithologist. In the Eastern States the Crow is with us all the year round, though probably the birds which we see in winter are not the same ones that live here in summer. At whatever season of the year we find them they are the same wary, careful, and yet sedate and dignified birds. If they have the least suspicion that harm to them is intended, they will not permit a near approach, while on the other hand if they feel confident that a person has no means of injuring them, they will sit on a tree and allow him to come very near. In winter when the ground is frozen and covered with snow the Crows are sometimes hard pushed to make a living. At such times they often congregate in great numbers on the seashore, and feed on the clams, mussels and other shellfish left bare by the retreating tide. Here they mingle with the snowy plumaged gulls, and the flocks of black and white birds spend their time together until forced ashore by the rising waters.

About the first of April the Crows begin to build their nests, but long before that—sometimes as early as the first warm days of February—great flocks of them gather in the tall trees of some wood and hold a convention, which seems to be, in part at least, devoted to the choosing of mates for the ensuing season. The males talk a great deal, and may be seen sailing here and there far up in the sky, and we presume that the females sit about in the treetops and watch the evolutions of their sable suitors. When all preliminaries are arranged and the time for building has come, both male and female begin to gather materials for the nest. This is composed in the main of stout twigs, which are sometimes torn from the living branches, and is lined with mud and moss, over which is placed cedar bark in fine strips, or sometimes hair and wool. The nest is usually placed in a rather tall forest tree, but sometimes a cedar of moderate size is chosen. It is a large and roomy structure, as indeed it must be to contain the four or five nearly full grown young which are ultimately to inhabit it. During the time when the mother is sitting on the palegreen, brown-dotted eggs, her mate carries food to her, and sometimes takes her place on the nest for a time while she flies off to get a little exercise and rest. When the young are hatched, both father and mother have to work hard to satisfy the cravings of their voracious brood. In going to and from the nest the old birds are careful to avoid attracting attention, but its location is often revealed by the cries of the young, which, when they are hungry, keep up a persistent croaking, which is readily recognized by any one who has ever heard it.

The young Crows when first hatched are tiny, naked creatures, remarkable for nothing except their enormous appetites. They grow rapidly, and before long are nearly as large as their parents. When taken from the nest young they make most interesting and amusing pets, being extremely intelligent and becoming perfectly tame so as not to require confine-

They are, however, rather mischievous, and much given to stealing anything that is bright and glistening. A pair of young Crows that came under our observation were perfectly tame, and as soon as they were able to fly were given full liberty. They associated on equal terms with the children, and took part in their games, seeming readily to comprehend their part. At night they roosted in the trees, and in the early morning were to be seen walking about the lawn. always presented themselves at the kitchen door at the usual time for feeding, which was just after breakfast, and if the servant who had the matter in charge delayed giving them their meal beyond the accustomed time, they called vociferously and soon brought her out. During the time the children were absent at school and there was no one for them to play with, they associated with the men who were at work about the place, riding on their carts and wheelbarrows, gathering food from the freshly turned up earth in the garden, and seeming more at home than any domestic animals on the place except the They sometimes made themselves a nuisance to the men, especially when the latter were doing anything that required much stooping. The Crows would alight on their backs and try to detach from their trousers the metal buttons, brightened by much wear. At these they would peck and pound with their sharp, strong beaks until the victim would entirely lose patience and strike viciously at them, when they would cleverly dodge the blow and fly off with a caw of derision. These two Crows remained about until winter set in, when they joined a flock of their migrating brothers and disappeared. It is said that some Crows have been taught to pronounce various words.

The Crow is well known for his courage against feathered foes, and he boldly attacks and drives away from the vicinity

of his nest any hawk, owl, or even eagle, which may venture near it. Against the owl the Crow seems to have an especial grudge, and if one of these birds is discovered by one of a flock of Crows, they all turn upon and attack him, beating and buffeting him until he succeeds in gaining some tree with thick foliage, where he is safe from further molestation. Sometimes the great horned owl takes a savage revenge on the Crows by killing and devouring one of their number. We have seen a marsh hawk in winter attempt to catch a Crow, hovering over and trying to seize one of three that sat on the topmost rail of a fence. The Crows seemed not at all alarmed by his demonstrations, and when he clumsily stretched out his claws to grasp one of them, the threatened bird only shifted his position by hopping a foot or two to one side. The hawk soon became discouraged, and flew away after other and more easily captured game.

Years ago when Crows were much more numerous along the North Atlantic coast than they are at present, these birds used to congregate in great flocks in the autumn, and their roosting grounds were well known. These were often in dense cedar swamps, and to and from them at evening and morning enormous numbers of Crows would journey, scattering out during the day to feed over a wide extent of country, again collecting at the roost at night.

Once in a long time a Crow is seen that is almost pure white, but such albinoes are very unusual.

The American Crow is eighteen inches long, and its outstretched wings measure over three feet. Its nostrils, which are at the base of the bill, are hidden under stiff, bristly, or hair-like feathers, which are directed forward, or toward the point of the bill. All the feathers are black, being glossy and shiny in the male and somewhat duller in the female. The bill and feet are black.

I T was at this unsettled stage of his career that Wilson, always eager for a change, went to visit his brother-in-law William Duncan at Queensferry, where he remained for a few months assisting his relative in his business and afterward accompanying him on what his biographer describes as "a mercantile traveling tour" over the eastern districts of Scotland.

This trip took him further afield than he had ever been before: new scenes, new incidents expanded his views, a pedlar's life presented itself as a life of independence; and now that he had at length the opportunity of engaging in so congenial a career, he realized for the first time how utterly distasteful was the sedentary employment for which he had been trained.

Full of his new plans, and resolved to attempt "the establishment of his good fortune in the world," as he tells us, he applied to his friends, who assisted him in providing the requisites for a small pack containing silks, muslins, prints, etc., and thus provided, he entered on his new career with a light heart and sanguine expectations of success.

The life itself was not without its charms—alive to the beauties of Nature, it was no mean privilege to be afforded daily opportunities of visiting the places rich in historic interest or scenic beauty that lie scattered over all the extent of the land. "His attention," says his biographer, "was attracted by everything of worth, and he would often leave his pack to visit some place of antiquity, or the former residences of his favorite authors and poets."

During his wanderings as a pedlar he visited every churchyard which lay in his way, transcribing all curious and quaint epitaphs, of which he made a collection of over three hundred, but these with other of his desultory writings were lost in sub-

sequent wanderings without having been given to the world, which is a great pity, for some Scottish epitaphs are very quaint.

While engaged in this occupation Wilson was adding constantly to his collection of poems, in which he described the leading incidents and emotions of his life; and from some of these it is evident that he found the life of a pedlar one that exposed him to cold, fatigue and hunger as well as to many petty annoyances that galled him sorely. It was by no means the life his fancy had painted it; the frequent cold repulses to which he was subjected and the meagreness of the profits resulted in his returning to Paisley somewhat disgusted, and in his attempting to secure fame and fortune by the publication of his poems.

Encouraged by the favorable opinion of Mr. Crichton of the Towns Hospital, he published his poems, set forth the merits of the contents of his pack in the following quaint handbill, and once more started to seek a market for the contents of his pack and for his new volume of poems.

ADVERTISEMENT EXTRAORDINARY.

Fair ladies, I pray, for one moment to stay,
Until with submission I tell you,
What muslins so curious, for uses so various,
A poet has here brought to sell you.

Here's handkerchiefs charming; book muslins like ermine,

Brocaded, striped, corded, and check'd, Sweet Venus, they say, on Cupid's birthday, In British-made muslins was decked.

If these can't content ye, here's muslins in plenty, From one shilling up to a dozen,

That Juno might wear, and more beauteous appear,

When she meant the old Thunderer to cozen.

Here are fine jaconets, of numberless sets, With spotted and sprigged festoons; And lovely tambours, with elegant flowers, For bonnets, cloaks, aprons, or gown. Now ye fair, if ye choose any piece to peruse,
With pleasure I'll instantly show it;
If the pedlar should fail to be favored with sale,
Then I hope you'll encourage the poet.

This second journey brought him nothing but bitter disappointment and wounded pride, thoroughly disgusting him with the pack, and convincing him that hawking his poems was no more profitable. Annoyed at the failure of his plans, he returned to his native town nearly penniless, and much depressed in spirits, convinced that a packman is a personage whom none esteem, and almost every one despises. He found the general opinion in which packmen were held was "that they are mean-spirited, loquacious liars, cunning and illiterate, watching every opportunity, and using every mean and low art within their power to cheat." He found, too, that for a packman to pretend to be a poet was only to expose himself to ridicule.

The sale of his poems proving insufficient to provide the necessaries of life, Wilson was obliged to resume the labors of the loom, at which he was tolerably expert, but he worked in a desultory, half-hearted way, and was always in want. This brought on feelings of despondence which affected his health, and gradually reduced him to a very low state. Rousing himself at length, and aided by the kindly counsel and exertions of friends, he again started with pack and poems, and as an additional resource endeavored to procure some writing for the periodicals of the day.

He contributed several pieces in prose and poetry to the *Glasgow Magazine*, and their acceptance brightened his prospects. At this time Wilson wrote the well-known ballad of "Watty and Meg," which was nearly contemporaneous with Burns's "Tam o' Shanter," and was supposed to be the production of that poet, a supposition which raised Wilson's spirits to a very high pitch; and, shortly afterward, in consequence of the *Bee* refusing to publish

Wilson's criticism of "Tam o' Shanter," Wilson sent the manuscript to Burns direct, and received a friendly reply, which led to a subsequent meeting of the two poets, and a pleasant evening at Burns's farm.

Wilson having been introduced by some of his friends to a debating society at the Edinburgh Pantheon, and having on this first occasion been drawn into an unpremeditated speech which elicited considerable applause, he took a regular part in future debates, making all his addresses in poetry.

In this way he became conscious of the possession of more than average ability, but entirely discouraged by his unsuccessful ventures, with a distaste for the loom, with no career open to him, and without habits of steady application, his life promised to be a failure. He recognized the necessity of training himself for some steady employment, and being recommended to fit himself for the position of mercantile clerk, applied for instruction in the necessary branches of arithmetic, in which he was deficient, and persevered for two days, but on the third day he gave it up.

Then came the practical result of this roving, unsettled life—he drifted into the companionship of agitators who were favoring revolutionary principles, and who persuaded him to write squibs reviling and satirizing the conduct of those who were the most offensive to their views of liberty, or obnoxious as employers.

Wilson, thoroughly familiar with all the persons and circumstances, and ready to redress imagined wrongs, was easily prevailed on, and wrote a number of poetical squibs, for one of which he was prosecuted and sentenced to imprisonment in the Paisley jail, and to burn the manuscript with his own hand.

Even while the sentence was being carried out, he became conscious of his error, and years later he referred to his conduct

in the matter as to "the errors of an undisciplined youth, with more sail than ballast, and often led by imagination."

Under bail for his offenses, bitterly disposed to indulge in further satires, discontented with himself and the conditions which he sought in vain to escape, he conceived the idea of emigrating to the United States and beginning life anew. The idea once entertained took firm hold of him,

and animated by a sufficiently powerful motive, he set to work on his loom with a will, and with the kind assistance of friends was soon in possession of the means to pay his passage to the promised land, for which he set out with his nephew William Duncan, a lad of sixteen, on May 23, 1794, and, after a voyage of twenty-two days, reached the land where he imagined all his wrongs would cease.

BIRDS OF THE PRIMEVAL WORLD.

Ι.

COME of our grandfathers and grandmothers were very estimable people; in fact, they are so to this day; but it is astonishing what a lot of things there are that they knew nothing about. Our fathers and mothers have learnt and found out so many things that they sometimes talk as if they knew almost everything, but between you and me, if the truth were only known, it would be possible to write a whole book about the things they know nothing about, and I shouldn't be a bit surprised if the present boys and girls were to grow up, and open their eyes, and find out a lot of those things and turn out to be the cleverest folks that ever lived.

The way things go on in this world is just a riddle, and some people are much sharper at finding out riddles than others, and every now and then one of these sharp fellows finds out one of Nature's riddles, and astonishes people; for when a riddle is once found out, you can't help feeling that the answer is a right one.

Now I want to tell you about some very extraordinary birds that lived ever so long ago; I would not like to say how many thousands of years, because somebody would be sure to jump up and say the world wasn't made then, and then somebody else would be sure to jump up with a sneer, and ask him how long he thought it

took Niagara to cut through a mile of rock? No, it's no good disputing about how long ago, and it's no particular matter. If you see an eagle soaring high aloft, you know that he's a long way off without measuring the distance, and so about those birds I was speaking of, it is quite safe to say that "they lived ever so long ago." Well, these birds used to live in the sea, some of them had no wings and got their living by diving, or, as one might say, by divers' means, and others had long wings like gulls; but the remarkable thing that distinguished them from any birds you ever saw was that, instead of beaks, they had jaws armed with long rows of teeth like a lizard or a crocodile. There can be no doubt about the birds having lived at the time I speak of, because their bones have been found, and their jaws with the teeth in them, and there couldn't be any better evidence than that. What appears stranger still is that all the remains of birds found in that page of the world's history had lizards' jaws and teeth, and, when you turn back the leaves still further (I suppose you know that the world's history is written on thick sheets of rock), there were no birds in the world at all, nothing to speak of in fact except lizards in great variety, and some of these, both small and large, walked on their hind legs, and stretched out their long necks in

search of frogs and other delicacies, and tried to behave themselves like birds.

I am going to tell you something more about these birds directly, and what pages of the world's history their remains are found in, but I want to point out to you first that the whole world's history is, as I said, full of riddles, and when the pages of the great stone book were turned over, and it was found that first came the lizards on four legs, then that they took to walking on their hind legs in the next page, then that there was a lot of birds with lizards' jaws in the next page, and ever after that the birds put away their jaws and teeth and took to wearing beaks as they do to this day, everybody felt that this was a riddle that he was bound to answer some-The bones were there and it was no good saying that they never had any flesh on them. Let any wide-awake American boy or girl come home late for dinner and find nothing on the table but turkey bones on all the plates, and you'll find it's no good telling him or her that there had been no turkey for dinner, and so it was with the old-world birds' bones. the riddle, and how are you going to answer it?

Well, most people said there must have been another creation before this one, but the geologists, that is, the people who know how to read the writing on the pages of the great stone book, said that that was all very fine, for if there had been one new creation, there must have been a great many, for after you turned back the leaves with the crawling lizards on them, you come to nothing but fishes, and when you turn back still another page, there are fishes, but they have no proper backbone; still nearer the beginning of the book, there were no fish even, but there were still lobsters to be had if there had been anybody to go after them, but the principal creatures that lived in that age of the world were clams and ovsters and such like

mollusca-as people call them-and you might think it a great pity that they were so plentiful and no market for them, but that is not the right way to look at it. But when you come to turn back, to the very earliest pages of the book there is nothing so respectable even as a mollusk; in all the world there was perhaps nothing with so much sense as an oyster, and that doesn't amount to much, although he has a beard—nothing, in fact, but creatures without brains or backbones or eyes, or in fact anything else except stomachs and trimmings, that is extensions which did for legs, arms, feelers or anything else. So if there must be a new creation to account for the birds with teeth, that I was telling you about, there must have been ever so many new creations. Perhaps there were, it's hard to say; but I'll tell you how Charles Darwin read that riddle about thirty years ago, and, although almost everybody doubted when he first told it, the more people think of it, the more it looks as if it were the true answer.

He said that God created some little simple cells in the beginning, such as it is not possible to see without the aid of a microscope, they are so small, and that these went on growing and giving birth to others that differed a little from each other, and that owing to the different circumstances they were placed in, some took to getting their living in one way, and some in another, and that this had such an effect on them that after a time they were no more like each other in tastes, habits and appearance than a respectable backwoodsman and a member of the New York Stock Exchange; then he said their children went on growing more and more different, according as their change of circumstances and habits affected them, and in course of time the infusoria, as they call the lower creatures, begat molluscs, and that these went on changing gradually and getting more brains, until in time their young ones

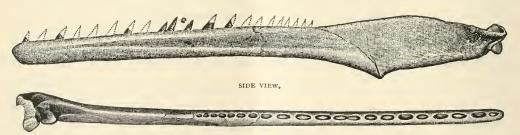
became fishes, and that after ages of time the fishes got backbones, and some of them became more and more like lizards, and, being able to live in either land or water, they went ashore and took to feeding on vegetables, until in the course of ages they never thought of going back to the water except to get a drink, and as some changed one way and some another, and gradually got warm blood, and wanted something to keep the cold out, some grew feathers and

they would grow up to be very different women, but for all that they would both be women; but Darwin answered them that if circumstances and habits would make a little change in twenty years it would make a bigger change in twenty thousand years, and besides that, he said some other things that are pretty hard to answer.

He said, for instance, that all the dogs came from one wild stock something like the wolf, but, although they had been only



JAWS OF HESPERORNIS—HALF NATURAL SIZE.



UPPER VIEW

JAWS OF ICTHYORNIS—TWICE NATURAL SIZE.

became birds, and some let their hair grow, and became kangaroos and opossums, and gave up laying eggs as their fathers, or rather I should say, their mothers, had always done before them.

A good many people laughed at this theory of Darwin's, for they said that, although circumstances and habits alter the character of man or any other animal, they cannot alter the species, or sort. It was true, of course, that if a woman died and left two little infant girls, and one was adopted by a family of wealth and refinement, and the other brought up in an institution and then sent to work on a farm,

a few thousand years in domestication, a visit to a dog show showed that they had been changed in ever so many directions. Who would suppose that the mastiffs, the Newfoundland dogs, the blood hounds, and bull dogs, and greyhounds, and Italian greyhounds, and spaniels and pug dogs and toy terriers, all came from one family? And yet there is no doubt that they did. So too with the pigeons. The fan tails, tumblers, carriers, and all came from one family—the blue rock pigeon—and all those changes have been effected in domestication. Then he pointed to the poll cattle of Aberdeen that have given up

wearing horns, which is a great change of fashion for an ox, and he pointed out so many other facts that people hardly knew what to believe. They were willing enough to believe that birds and animals might go on changing until they are no more like their own relations than a red Indian is like a Broadway dude, but as to man having descended from a monkey-no-they couldn't believe that. The white man might have been descended from the Bosjeemen of Africa or some such low race, but not from a monkey. Well, Darwin said he didn't believe that the parents of the first man were exactly monkeys or gorillas, but a something half-way between a gorilla and a Hottentot. In fact he said that as all changes were gradual, there must be a missing link or something between, to connect the forms of life now on the earth with the forms of life found in the rocks. Well, this "missing link" became a great catch-word and was in everybody's mouth, and somebody remarked that if Darwin was right there must be a great many missing links, and for his part he wouldn't believe in Darwin's theory until he saw the missing links between the reptiles and birds, for as the reptiles lived first and the birds were found a little further on in the book.

there must have been a lot of intermediate or half and half creatures between them.

Darwin admitted that that was true, but then, he said, the stone book was so big, and so many of the records had been rubbed out, that one might possibly never be able to read the whole history, but that for all that, if we looked long enough, we should find some of the "missing links" sooner or later, and now, as I set out by telling you, his words have come true. Long ages ago, before this continent rose above the surface of the ocean, when the crests of the Rocky Mountains formed only a reef of islands, the sea that washed them was full of life, and these birds, the divers, and the sailors, with their longtoothed jaws, used to go fishing for a living, and perhaps even for sport in those very waters. There can be no doubt about it, for their bones are found imbedded in the chalk and mud that formed the bottom in those days, but which has since been raised up and covered with vegetation and a fruitful soil, and become fit for the support of a great nation. We give here cuts representing side views and upper views of the jaws of Hesperornis and Icthyornis, and will tell more about these birds in our next number.

THE AUDUBON KNIGHTS.

"OH dear! I just wish I was a king, wouldn't I make things spin!" and Alex shut his book with a bang.

"What's the matter?" asked mamma, who was sewing near. "Whose head do you wish to cut off?"

"Nobody's, mamma, but I've been reading about earls and lords and knights of long ago, and how they treated the poor people that they had charge of, and I just wished I was a king, and I'd turn the tables on 'em mighty quick and let 'em find out how it felt'

"That's what Bruce did," put in Jack, who was playing checkers with Seymour. "But I'd rather be a baron myself and be kind to the paupers, and so be a bright and shining example to the rest of them. Go ahead Sey, it's your move."

"You a bright and shining example!" almost shouted Seymour, "listen to the conceit of the fellow, will you? why, you're always the one in scrapes. Hold on! mind what you're about, will you?" he added, "it's my turn yet, you have to crown me, you know."

"Boys," said mamma, looking up at the "Troublesome Trio," as papa called them. "Boys, how would you like it if I should make you knights, and set you to govern certain portions of the farm?"

Three curious faces were turned toward her, and Jack said anxiously:

"You don't mean us to carry soup and jelly to the people in Frog Hollow, do you? or see that the children go to school?"

"Oh no, not at all," and mamma smiled, for Jack disliked missionary work exceedingly. "Your subjects shall be of the feathered tribe. I want you to protect the birds, and see that no depredations are made on their nests. There used to be so many about when I was a little girl, and now we have hardly any, and the few we have are so shy and timid that one can't go near them."

"Do you mean," said Alex, "that we are each to have certain nests to protect?"

"No; you are each to have a piece of land, and you are bound to protect any bird that builds on it. Do you see, it is just as it was long ago. I am your queen, and you are my barons. I present you with the land (just as William did the Norman barons) and you must protect the people. Do you like my plan?"

"First-rate idea; what piece of land are you going to give me?" asked Seymour. The checkers had been forgotten, and both he and Jack sat tipping their chairs back against the wall.

"To you? well, I will give you the north pasture and the strip of woods behind it."

"Thanks, O, most mighty queen, and I, on my bended knee (only I won't bend it, 'cause I bruised it this morning) do here promise and vow to protect it at the risk of my life, to—"

"Oh get out, Seymour, don't be an ape. What'll you give me, mom?" said the eldest of the boys.

"Well, Alexander, to you I will give the old mill and the pasture around it, and

Sleepy Hollow. Jack, you can have Rocky Point and the marsh by the new dam, and the hedge on Willow Lane. Now to-morrow you must explore your land and see how many nests there are already, and all through the spring you must keep account of them, just how many there are, what kind, and how many birds in each. In this way you will learn a great deal about them. And you must hereafter protect them from the village boys and all other enemies."

"Can't I do something too, mamma?"

"Indeed, you may," and mamma stroked the fair curls, well pleased that Philip, the delicate one of the boys, should take an interest in anything that would take him out of doors. "You shall have the garden, and the orchard, and the wall behind the barn—the barn too, if you like."

The next morning the boys started off on their exploring trips. They passed the barn, and went together along the lane with its zig-zag fence, but where the road came to the pond, they separated, and went each to his own province. Seymour, crossing the creek on stepping-stones, and pushing his way through a hedge, began to climb the steep ascent of north pasture, or the high pasture as it was sometimes called. At the top of the hill, parallel with the fence, stood a row of cedar trees, here there was a great chattering going on, and as he drew near, he saw hundreds of blackbirds flying from tree to tree. When he came to look into the matter, he found that a settlement was being made on his property, and several nests were in the trees. After watching them for a while, he crossed the meadow to the woods. Here he heard nothing but birds, birds on all sides, some singing ravishing melodies, some twittering busily at their work, and some scolding angrily. In vain he tried to follow the fairy voices that called to him in an enticing manner to come look at their nests. Through the bushes, over fallen trees, through brambles that caught and held

him fast, he scrambled, looking eagerly for the dainty nests that were too well hidden to be found so easily.

At last, baffled and tired and hot, he sat down to rest. The birds laughed mockingly all around him, but he laughed back, saying, "Never mind, wait till this afternoon, when it's cooler, and I'll fix you."

In the meantime, Alex had been to the old water mill, where a host of barn swallows were making their homes, and a few sleepy owls whirred through the rickety



HE SAW HUNDREDS OF BLACKBIRDS.

roof at the sound of his approach. Then out across the meadow, peering into every bush, and under every tuft of grass for songsters' nests, listening, with a thrill of delight, to the soft warble of the "Orpheus" and the rich note of the robin, coming melodiously from the woods, to Sleepy Hollow, a quiet grove of chestnut, oak, and beech trees, that lay between three high hills—one of them the north pasture itself—to where, in a tall tree, dead long ago, a woodpecker made his nest, sticking his head out now and then, and giving his shrill *Flick-flick*, as though gossiping about the weather.

Jack took his way to Rocky Point, a high peak of rocks that raised up beside the socalled new dam (which was not really new at all, for papa had often been swimming in it when a boy, but only relatively new, in comparison with a still older milldam.) No birds were to be seen or heard here, so he slid down over the rough stones to the swamp that bordered the pond on one side. Here, to his delight, were three little sandpipers, running out over the mossy logs and stones, and tilting themselves about as if they were playing seesaw. After a whole morning's search for their nests, and after falling into the mud three times, he made up his mind that they had none, and resolved to go home, and on the way was much gratified by finding five sparrows' nests in his hedge on Willow Lane.

They all came in to dinner as hungry as hawks, and full of their discoveries.

"There's a whole colony of crow-black-birds in the cedar trees of the north pasture," began Seymour.

"Yes, and three sandpipers' nests in the marsh (at least the birds were there; I'm going to look for the nests again this afternoon), and no end of hedge sparrows (real nests) on Willow Lane," put in Jack.

"And there's a pair of woodpeckers building in Sleepy Hollow, and some barn swallows in the mill," finished Alex.

"Well, there's a bluebird in the orchard, and three robins in the garden," said litle Phil. "I don't know what's in the wall. I got so much interested in watching the bluebird, that I didn't get that far."

"Well, my doughty knights," said mamma, "you have found out where some of your tenants live, you must now see to it that they are allowed to remain there unmolested."

"Yes'm, we will," came the chorus.

At tea they were as much excited as they had been at dinner, for many new and startling discoveries had been made.

"And what do you think, mother?" said

Alex, when, supper over, they sat on the porch and watched the silver moon climb up the evening sky, "while I was watching a lovely catbird (or Orpheus, rather) a little ragamuffin came along—one of your friends from Frog Hollow—and he pulled out a slap-jack, and (he didn't see me) was just going to let fly at my Orpheus, when I grabbed him by the nape of the neck and gave him such a trouncing that he'll not get over it in a hurry."

"Ah! but my dear brother," remarked Jack, "I did better than that. I am afraid your friend will come back again and do a great deal of damage to spite you."

me say that I think you took the wisest steps possible in the matter. But we must go to bed, here's Phillie sound asleep in papa's arms. Good-night, my brave barons. I wish you every success with your 'faire' countries."

The summer passed and autumn came. The boys had learned much in the past four months. Every bird that flew was familiar to them, and they had little books in which they wrote down their observations, and in which they had skilfully drawn maps of their separate provinces, on which were marked the trees that bore the nests.

The birds were gone. After a series of



"I WAS SO MUCH INTERESTED WATCHING A BLUEBIRD IN THE ORCHARD."

"I don't see what else I could have done or how I could have done it better," said Alex, "unless I'd killed him," he added, "and I didn't want to do that."

"Then listen to what I did, and hereafter do not scoff at your brother's 'bright and shining example.' I," and he poised himself gracefully on the railing, and spoke slowly and impressively, "I took a lot of Audubon pledges down to Frog Hollow and enlisted all the boys, and they've sworn to protect the birds, and they're interested too. Haven't I got a 'goodlie lot of retainers' for my earldom?"

"Bravo!" "Well done!" came from all sides, as he clambered down from his perch and went to his mother, saying:

"There are their signatures, you take charge of them, will you?"

"Certainly, my son," said she, "and let

plaintive farewells, they had winged their way to the sunny south. And then winter came, and with his soft snows filled to the brim all the forsaken little nests.

It was the day before Christmas, and the boys had been gone all afternoon to hunt for greens and holly in the woods, and now it was growing dark and they had not come back, and mamma and little Phil were watching for them from the window. Pretty soon three stout figures staggered up the drive under a load of holly and laurel boughs, and three merry faces were turned toward the window, shaking the snow off, and all talking at once. At last Alex was heard say:

"We've had a splendid time, and we did not forget the birds either."

"The birds! dear; why they went south long ago."

"O no! mamma," put in Seymour, "the chickadees are here, and the sparrows, and we've hung sheaves of wheat all round the porch, in the orchard and on some of the trees in the woods, Swedish style, you know."

And that night, when four drowsy heads were laid on soft pillows to dream of coming splendors, mamma, candle in hand, went the rounds, and as she bent over the dark heads, she thought of these lines from the "Ancient Mariner":

"He prayeth well who loveth well
Both man and bird and beast.
He prayeth best who loveth best
All things, both great and small;
For the dear God who loveth us,
He made and loveth all."

ETHELDRED BREEZE BARRY.

GOLD BEAUTY.

THE STORY OF A BUTTERFLY.

OLD BEAUTY'S first recollections were of finding herself in a shady corner of the garden under a lilac bush.

She supposed she had lived before this, but, try as she might, she could remember nothing about it, and so for all practical purposes it is just as well to say that she began her existence on that particular June morning when she first became conscious that she was alive.

Gold Beauty learned so many things that morning that it is a great wonder so much hastily acquired knowledge did not bring her down with brain fever; for, besides finding out that she was alive, she found out there were many other live things all around her-creatures that lived in the grass, creatures that lived in the air, and creatures that lived in the treetops. Everywhere the whole earth was full of living beings, and this seemed wonderful to her. And as she looked around the old garden and saw its rows of pretty flowers, and its clumps of blossoming shrubs, its neat vegetable beds, and its thrifty asparagus patch; to say nothing of the wonderful blue sky that hung over it, and the unceasing music that kept it full of melody, she was well content to find herself in the midst of it, and thought the world a charming place.

At first she wondered whether the things

had always been there, or whether they were new like herself, but this was such a puzzling problem that she soon gave it up, and just enjoyed everything without caring whether it was new or old. The garden was an old-fashioned one, where beauty and utility were happily combined. Sweet peas climbing up the ugly bean poles, and pansies peeping up among the radishes, while sweet mignonette ran round and round the carrots in the friendliest manner, just as Sunday might run after Monday saying, "Here is some lavender, dear, to put among your clean muslins."

Gold Beauty thought that such an arrangement could not be improved upon, and would have scorned a garden where flowers and vegetables stood jealously apart. Thus it is not surprising, considering the circumstances, that she also developed into a very sociable creature, and felt on friendly terms with every one, and admired everything in the garden, herself included.

Not that she was vain, oh no! that would have been silly when there were so many other creatures, so much more beautiful than herself, but she took great comfort in her beautiful green robe with its blue and yellow and pink trimmings, and was glad that her appearance was in harmony with the beauty everywhere around her. And

it was certainly a happy thought to give life to one who enjoyed it as much as she did, for from the flaming oriole that rocked in the topmost branch of the tallest locust tree, down to the little lady-bird that thought she was a great traveler if she journeyed twice around the rim of a damask rose, Gold Beauty loved one and all and was happy in thinking that they loved her in return.

It is true that not many of the tenants of the old garden even had a thought to spare for Gold Beauty, but she had her friends for all that, among the humbler class to which she belonged, for, of course, being only a creeper, she did not expect to be noticed by any one but creepers, and would have been quite overcome with shyness if a flyer had paid her any but the smallest attentions. Yet there were flyers and flyers, Gold Beauty soon found out, and she divided them for her own convenience into two classes: those that lived almost entirely up among the trees where the songs were, and those that seemed to prefer the lower regions and were delighted chiefly with the flowers. She amused herself sometimes with wondering which class she would join if she had her choice. She thought there were many advantages to be considered on both sides. It is true that the low-flyers were in some respects more in harmony with the flowers, being so light and airy that they could balance themselves with ease on the bell of the tiniest lily of the vally, or go to sleep if they liked in the bosom of any convenient rose they might select; they were also exceedingly beautiful with their wings gorgeously painted on either side, in the most glowing colors. Still the high flyers had the songs all to themselves, and could soar up to the very sky, even if their wings were not painted, and Gold Beauty had hard work to make choice between them, and used to get her poor brain quite excited over the problem until she reflected that she was only a creeper after all, and wings were a matter of no concern to her.

Then she would come back to realities with a jump, and set about her real business of life, which was eating. Yes, it is true, she was such an eater, that it seemed sometimes that she could not find enough in the garden to satisfy her. Not that she was a glutton, oh no; but she belonged to a family of rapid growers, and they really could not help having ravenous appetites.

She would have helped it if she could, for she often found it inconvenient to be always hungry; and often had to give up invitations to tea, because she was ashamed of her appetite; and she grew so fast that her clothes were all the time becoming too small for her. This was her greatest grievance, for she often found herself too large for her old suit before she could get another one ready, and then she was forced to hide herself in some secluded place and go entirely without eating for a day or two, and of course she ceased growing for the time, but at the end she could come forth again clad in fresh raiment.

Although this happened over and over again, Gold Beauty kept on eating as much as ever, for she had made up her mind to grow all she could, as fast as she could, and so get through with it, for she knew that her appetite would never leave her so long as she had to grow.

In her journeyings through the garden for food and pleasure, she came upon many curious things, but nothing puzzled her more than to find every now and then one of those queer-shaped gray towers in which she was told poor captives were kept.

She could never find out why they were put there, or what they had done, and she spent some time in imagining reasons for their imprisonment, wondering occasionally if it could be possible that any of them were put there because they had enormous appetites. This very thought made her

feel so uncomfortable that she would stop eating for a while and take to watching the high-flyers. And here she often found puzzling things too, for she often saw one of her own class carried off by some jaunty high-flyer, and she wondered why it was done. None of the creepers ever came back to tell her, and she often felt aggrieved because none ever carried her up right amidst the songs. But one day when she had taken a longer journey than usual and had, in fact, almost reached the little brook that ran along under the apple trees, and which was separated from the garden by a wide space of green grass, she saw a sight that explained this mystery and filled her heart with terror.

She was reclining on a broad grass blade, enjoying the sunlight, and taking pleasure from the sound of the little brook that was rippling over the pebbles, when she saw a high-flyer sailing rapidly toward her and bearing along with it one of her creeper friends.

Gold Beauty thrilled with excitement, for she thought her time had come, and she was also going to be caught up and taken to the treetops. But she remained instead, quite unseen, owing perhaps to the color of her dress which was the same shade as the grass blade, and the high-flyer, who seemed in this case to be a low-flyer too, dropped right down in the grass, and the curious watcher saw her enter her home, which for some strange reason she had built right down there, and feed her hungry babies with the poor creeper, which they devoured with the greatest relish.

Gold Beauty looked on while her heart swelled with pity. Cruel, cruel, high-flyers, she thought, not to know that the poor creepers did not like to be eaten. She shuddered at the sight and then moved quickly away, for she did not doubt her turn would come next if the heartless mother saw her.

After this Gold Beauty's worship of the

high-flyers was mixed with a little distrust and she took care to keep out of their way. But one day the thought came to her that perhaps she had judged her old idols too harshly, for it was just possible, she thought, that *all* high-flyers did not eat creepers.

Perhaps it was only those that preferred the ground for their homes instead of the breezy treetops, that were so cruel as to feed their children upon innocent living beings. Filled with this idea Gold Beauty immediately considered it her duty to journey among the treetops and see if it were true.

Accordingly she set forth one beautiful day when the air was soft and the old garden seemed full of peace, and made her way to the cherry trees that threw their long arms quite over the garden wall.

To climb such heights was tedious work to a slow-moving creature like herself, but she pressed on, and moved from branch to branch, and tree to tree with the utmost patience. But, alas! all that she saw only confirmed her in the belief that the highflyers one and all looked upon creepers as things only fit to feed their own petted darlings on, for everywhere she went, and every home she visited showed the same thing—a group of hungry children waiting eagerly for their mothers to bring them hapless creepers for their food.

This all affected Gold Beauty's spirits so that even her appetite began to suffer, and the last place she visited, which contained six ferocious babies, was too great a strain upon her nervés, for she quite gave up, and, a shower coming down at the same time, she made a little pavilion for herself of a leaf and abandoned herself to the most gloomy views of life.

A short time after this, however, she became a little more cheerful, for she suddenly found that she had stopped growing. She knew that this had happened by her complete loss of appetite, and in her joy at knowing that she had ceased to be a slave

to eating she again began to take a little comfort in life. Once more the garden seemed attractive, and, although the highflyers had ceased to call forth her old, rapturous admiration, the low-flyers still remained as beautiful as ever, and she never wearied of watching their graceful flights or of seeing them hover over the flowers, whose bright hues they rivalled, and drink the delicious nectar upon which they existed. In those days Gold Beauty had no trouble in choosing between the high-flyers and low-flyers, for the latter had become her favorites, and their brilliant presence gave the garden its most delightful charm. But just when Gold Beauty had quite grown up, and expected to spend the rest of her days in peace, fate held a calamity in store for her, more dreadful than any she had ever dreamed of.

The wicked fairy who made it her business to wander around the garden and blight the flowers with mildew, and blast the young buds, and scatter the blossoms to the wind, and kill the fruit, and even sometimes quiet the voice of the little brook, found Gold Beauty out and put her fateful spell upon her. Then began such a time of woe that it is a wonder that poor Gold Beauty ever survived it; for while she knew that the fairy had cast the spell upon her, she was quite powerless to undo it, and could only go on yielding more and more to her wicked charm. This produced such mental anguish that one would have thought the fairy would have had some pity. But she only kept on her cruel work until she had her victim firmly sealed up in one of those gray towers, and no one knows what other mischief she might not have done had not her power ceased there. But even this hard-hearted fairy could do no more than confine her in the tower and leave her there, for there her power ceased.

Poor Gold Beauty! behold her now, stripped of the beautiful green robe with its golden spots, and clothed in a shapeless garment of dingy gray. Shut out from the old garden with its sunlight and fragrance, and confined in a gloomy prison whose thick walls no ray of light might pierce.

All her bright companions still wandered free and happy through the fair summer days, the flowers still smiled in beauty, and the little brook still sang its careless song, but she saw nothing, heard nothing of all the glad life around her. Ah! who would not pity Gold Beauty now?

And still she did not hear when Summer gathered all her gay children in her arms and bade the old garden farewell; when Autumn came with her gold and sunset treasures and scattered largess over the land, or when Winter sent his frosts and snow and covered the earth with dazzling beauty. Very dark days were those for Gold Beauty.

But the wicked fairy could not have her own way forever, although she kept Gold Beauty in her prison for many weary months. For one day a beautful spirit came flying into the garden, and went traveling around to see what the wicked fairy had been about, for she knew her very well, and did not doubt she had been up to some mischief.

How indignant the spirit became as she flew from one gray tower to another, and found each one occupied by some poor prisoner. Her first thought was to set them free, and she would have liked nothing better than to bring an army of her soldiers and tear all the gray towers down at once.

But this she could not do, for as the wicked fairy had used magic to confine the prisoners, the spirit must also use magic to set them free, and she set about this so cleverly that no one suspected what she was about until the poor captives were nearly all delivered.

She began with those who had been con-

fined the longest, and this soon brought her to Gold Beauty, who lay despairing in her gloomy cell all unconscious that freedom was so near at hand.

But one day, while brooding over her woes, she suddenly felt that the whole world was full of wonderful music; this was the magic song of the beautiful spirit that had penetrated her darkened prison house, and already begun its work of deliverance.

For, as Gold Beauty listened, it seemed to her that the song was calling her outside, and wooing her to hope again with a powerful but delicious charm. She listened in rapture, for the music seemed filled with sweet remembrances of her former happy life. Again she heard the robins' notes up among the apple boughs, and again she saw the flash of bright wings in the air, while she felt the summer wind once more laden with the perfume of violets.

Her heart filled with wild longing to be free and she struggled to break the chains that she had wound herself in while under the wicked fairy's spell.

And still the song went on calling her to sunshine and freedom in the glad world outside.

Gold Beauty never knew how it came about, but suddenly her whole body was filled with wonderful strength, and her heart endowed with such courage, that she felt she could accomplish anything. One by one she broke her chains, and slowly and with much toil made an opening in the gray wall of her prison. Each new movement toward freedom brought greater hope, and, as she worked, the magic song grew louder and sweeter, until it seemed that there was nothing but music everywhere.

At last the gray wall gave way, and the poor captive once more crept out into the

bright sunlight, and then the song died softly away until it seemed only like the faint trilling of a far off bird, and the beautiful spirit flew away with a happy smile to carry deliverance to some prisoner in another sealed tower.

Gold Beauty lay quiet for a long time after she came out of her prison, for she felt quite worn out with her unusual exertion, but at last the fresh air, and the bright sun, and the sense of freedom made her feel like moving about and visiting some of her former haunts.

And then oh, joy of joys! what did she find out? That the spirit had not only been the means of her deliverance, but that she had also given her wings. And such wings! Golden as the sun, and marked with spots of velvety black.

Gold Beauty lifted them up and down softly, and then spread them with delight. Large wings they were too, and strong, and she knew they would bear her through many a dizzy flight; and, as she tried their power for the first time she discovered something else that gave her pleasure, for she found that she was a low-flyer instead of a high-flyer, and this is just what she would have wished had she been given her choice.

And so all things turned out well at last for Gold Beauty, and in the joy of her new existence she almost forgot that she had ever been a creeper or confined in a gloomy prison.

Gaily she flew from place to place discovering such fresh beauties everywhere that the old garden seemed like a new world—not more beautiful, but different; and filled with an ever deepening charm of which she herself was a part, together with the songs and the flowers, and all the fair things that contributed to render the garden an earthly paradise.

HENRIETTA CHRISTIAN WRIGHT.

THE AUDUBON NOTE BOOK.

MEMBERSHIP RETURNS.

THE month of May closed with a total registered number of 46,484, showing an increase during the month of 833 members, drawn from the following sources:

New York	190	Kentucky	2		
Massachusetts	178	Colorado	1		
Pennsylvania	58	Missouri	6		
New Jersey	49	California	13		
Connecticut	58	Kansas	15		
Maine	20	Georgia	I		
Rhode Island	ĭ	North Carolina	31		
Indiana	13	Delaware	36		
Ohio	9	Tennessce	4		
Washington Territory	3	Alabama	2		
Minnesota	16	Canada	132		
New Mexico	I	-	_		
			833		
C. F. AMERY, General Secretary.					

BIRDS ON THE INCREASE.

FROM a great number of sources we have received the very gratifying intelligence that birds are perceptibly on the increase this year, and the daily press has recorded similar observations, some of their correspondents ingeniously attributing the increase to the mortality among the sparrows during the severe snow storm last March. Unfortunately for this argument the sparrows don't kill birds; the most that is charged against them in this direction is that they disturb and drive away nesting birds and destroy their eggs. All this might affect the number of young birds of the season, but the subject for congratulation is the number of birds that came back from the south to build, and the sparrows had nothing to do with affecting these returns. There is no need to go so far afield in search of a cause when an adequate one is at hand in the restraining influence of the Audubon Society.

THE POET'S APPEAL.

WE never have had a poet's corner in the AUDU-BON MAGAZINE, in fact, as is well known to our contributors, we have religiously and firmly excluded all metrical productions from its columns. In this determination we have of course been animated by the very best of motives, but there are moments when we have been brought face to face with the question, "Is this want of faith in the inspiring influence of poetry the result of superior insight or of some deficiency in your own spiritual natures?"

Modesty and integrity alike urge to an impartial decision, and even at the risk of proving ourselves wrong, we are determined to avail ourselves of an opportunity that now offers itself for putting the matter to the test. Can poetry inspire to generous action? That is the problem we have determined to solve, and the conditions are eminently favorable to a right decision. Month after month have we appealed to our readers in the most earnest prose language at our command to contribute to the erection of the Audubon Monument, and our appeal has for the most part passed unheeded by, but the poet Isaac McLellan put his pen to paper in good flowing rhyme in behalf of the monument, and under the influence of the stimulus put his other hand into his pocket and sent us liberal largess. Is it not then possible that others may be similarly moved by his poetic appeal? That is precisely the problem for solution, and one which we have determined to solve by publishing it, being willing to be proved wrong for the sake of truth and the money which will have to be put in evidence,

THE "MAGAZINE" AS AN EDUCATOR.

Editor Audubon Magazine:

Will you please thank Miss Florence A. Merriam for me for her "Fifty Common Birds"? I have learned so much this spring, with her help, about the birds. Last year, if any one had asked me what kinds of birds we have in our neighborhood, I should probably have answered, "Oh, robins and catbirds and sparrows." Of course, I knew there were more than those I have just named, but I never knew how many more until I saw them through my opera glasses. Just see my record for the past month. I have italicized the names of those I never saw before this spring.

April 6-Yellow-shafted flicker.

April 14-Chippy, kinglet and a pair of juncos.

April 18—Song sparrow, white-throated sparrow and a wood thrush.

April 28—Robin building in the honeysuckle on our side porch. Saw the chimney swifts to-day, first time this year.

May 1-Pair of Baltimore orioles.

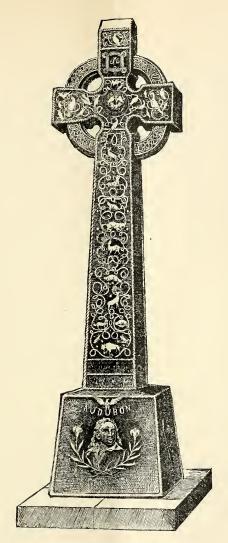
May 2—Meadowlark, black and white creeper, black-throated blue warbler and a chewink.

May 5—Chewink or towhee, cathird (first time this year) brown thrush, belted kingfisher, Baltimore oriole and a white-throated sparrow.

So you see I owe a great deal to Miss Merriam, for it was from her descriptions that I found out the names of my feathered friends.

E. B. B.

GERMANTOWN, Pa.



THE AUDUBON MONUMENT.

AH, noble Audubon, who lov'd so well
Thro' Nature's loveliest, loneliest woods to tread.

To paint with matchless brush and loving heart, The birds of song thro' her dominions spread; To track with patient toil the forest glades, A wanderer lone in wildernesses drear, Toiling o'er Northern mount and Southern plain, Unwearied with thy task thro' all the year. Dear to us all is thy illustrious fame, Deep in our hearts we consecrate thy name!

'Mid solemn silence or the sylvan sounds Of woods primeval, thou did'st love to rove, Noting all bird-life of those leafy shades, Rejoicing in their joys, their songs of love. The birds that skimm'd the empty fields of air, The birds that thro' the sombre forests sped, The flocks that o'er the boundless prairies flew, The sea-fowl o'er the salty lagoons spread, Were all familiar in each tone and hue, Each gorgeous plumage, each melodious note, Each hovering wing that o'er your head would float;

Sweet then the task the master's hand to trace Each grace, each glory of the feathered race!

Then let us raise a fair, memorial shaft, Sculptur'd with birds of every race and clime, Grac'd with thy lineaments, thy honor'd name, Memorial of our love thro' future time. Let it arise where first the glow of day Around its shapely pinnacle may fall, And sunset's rosy colors shall suffuse The graven name so precious to us all. There then the birds you lov'd their songs shall pour,

Delicious harmonies of wood and vale, Where royal eagle shall above ye soar And evening whippoorwill sound mournful wail.

ISAAC MCLELLAN.

EMINENT PEOPLE ON BIRD PROTECTION.

OAK KNOLL, Danvers, Mass., and mo., 20, 1886.

Editor Forest and Stream:

I heartily approve of the proposed AUDUBON SOCIETY. We are in a way to destroy both our forests and our birds. A society for the preservation of the latter has long been needed, and I hope it is not too late for the accomplishment of its objects.

I could almost wish that the shooters of the birds, the taxidermists who prepare their skins, and the fashionable wearers of their feathers might share the penalty which was visited upon the Ancient Mariner who shot the Albatross. Thy friend,

JOHN G. WHITTIER.

Brooklyn, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I am heartily in sympathy with your purposes for the protection of birds, and should be glad to contribute any influence that I can to that end.

If there were no purchasers there would be no demand, and no reason for slaughtering these winged gems. But as only women create a demand, it rests upon them to stay this wanton destruction. I am sure that it is only necessary to bring before American women the cruelty of this "slaughter of the innocents" that fashion is carrying on, to secure a renunciation of this ornament and the salvation of birds.

On this subject the kind feelings, the taste, and æsthetic sympathy of the whole community are on your side, and if you persevere you will surely win.

HENRY WARD BEECHER.

CORNWALL-ON-HUDSON, N. Y., Eeb. 22, 1886.

Editor Forest and Stream:

You have indeed my hearty sympathy in every effort to prevent the slaughter of my innocent little neighbors and friends, the birds. In the destruction of forests and birds, the people of this land are inviting very great evils and inflicting wrongs on posterity which scarcely can be measured. The press should render it impossibe for women to sin thoughtlessly and ignorantly in demanding little birds for their adorument. The evil should be brought home so fully to the knowledge of all, that the continued wearing of our useful little birds should become the badge and indication of a callous, vulgar nature. You are doing a humane and patriotic work in exciting public aversion to one of the most cruel and stupid wrongs of the age.

Respectfully yours,

EDWARD P. ROE.

WEST PARK, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I scarcely need assure you that your undertaking to form a society for the protection of our wild birds against the ravages of the milliners and the sham scientific collectors has my warmest sympathy and approval. It is a barbarous taste which prompts our women and girls to appear upon the street with their head gear adorned with the scalps of our songsters; and it is mere vanity and affectation which prompts so many persons to make up cabinets of the nests and eggs of the same. The destruction of our birds from their natural enemies is immense, and this craze of the collectors, and folly of the milliners and their customers in addition, threatens their serious diminution.

I hope you may succeed in creating so strong a public sentiment upon the subject that the collectors of skins and eggs for the unworthy purposes of fashion or to indulge the vanity of pseudo-naturalists may suddenly find their occupation gone.

Please add my name to the list of the members of the AUDUBON SOCIETY. Very sincerely,

John Burroughs.

160 W. 59TH STREET, \{\) NEW YORK, Feb. 20, 1886. \{\)

Editor Forest and Stream:

No one who will take the trouble to give the matter a few moments' serious consideration can be in doubt, I think, as to the wisdom of organizing the AUDUBON SOCIETY, and I am thankful that such a step is contemplated. There is an element of savagery in the use of birds for personal decoration, which is in grotesque contrast with our boasts of civilization. But even the savage stops short, as a rule, with the feathers. It is only Christian people who think it worth while to butcher a whole bird to adorn their head gear. I am sure, however, that this is largely from that unreflecting habit which is a leading vice in people who follow the fashions. But it is a vice; as Hood sang, when he wrote—

For evil is wrought By want of thought As well as by want of heart.

If the Audubon Society can teach men, and especially women, to think on this subject, half of the battle will have been won. Henry C. Potter.

ANDOVER, Mass., Feb. 21, 1886.

Editor Forest and Stream:

I am in earnest and indignant sympathy with the motive of any society organized to prevent the murder of birds for decorative purposes.

E. S. Phelps.





THE PILEATED WOODPECKER.

(Ccophlaus pileatus (Linn.))

THE AUDUBON MAGAZINE.

VOL. II.

AUGUST, 1888.

No. 7.

THE PILEATED WOODPECKER,

M OST of our readers are familiar with the smaller woodpeckers, so common in our forests and orchards, but perhaps few of them have ever seen the great bird which we figure this month. The Pileated Woodpecker, or, as it is sometimes called by the farmer, the Woodcock or Logcock, is as large as a pigeon. It is found in more or less abundance over the whole of North America, wherever heavy timber grows, and yet it is nowhere abundant. One bird, or perhaps one family of birds, occupies a large territory, and even though one may be traveling all day through the forest, he will not be likely to see more than one or two Pileated Woodpeckers. As the woods are cleared away before the advance of civilization, these birds withdraw also, for they are shy and solitary in habit, and are not contented save in the deepest recesses of the loneliest forest aisles. We have found this species more abundant in Washington Territory than we remember to have seen it elsewhere.

Not only is this species fond of the deep forests, but he is a very shy bird as well. He doesn't like to have any one get too near him, and watches with his keen eye the movements of any strange object. We have more often obtained a close view of this bird by his flying to and alighting near us when we were sitting still and entirely ignorant that he was in the neighborhood, than by endeavoring to approach him. His eyes

and ears are both quick, and are constantly on the alert, and usually, no matter how carefully the approach may be made, it will be found that the bird is fully aware of what is taking place, and as soon as he has satisfied himself that he is the object of these stealthy movements, he is off with a loud cackling cry, and has soon put half a mile of distance between the suspected person and himself.

In those localities which suit his tastes, the Pileated Woodpecker is resident the year round. Cold weather has no terrors for him, and he seeks his living just as unconcernedly amid whirling snows and in biting frosts, as during the gentle rains of April or under the torrid sun of August.

In the early spring, these Woodpeckers mate, and begin to prepare a nesting place. They choose some great tree deep in the forest, and attack it with their stout sharp bills, boring in it a hole from two and onehalf to three inches in diameter at the mouth and sometimes eighteen inches deep. At the bottom the cavity is somewhat larger than at the entrance, being five or six inches in diameter. Here, on a bed of chips left for a lining to the nest, five or six eggs are deposited, pure white, shining and glossy like porcelain. These eggs are about as large as those of a common pigeon. Both male and female take part in the labor of hatching, and each brings food at frequent intervals to its mate on the nest. After the

young have attained a part of their growth, they often clamber to the mouth of the hole and may be seen looking out.

Even before they have left the nest the young seem to share the wildness of their parents. Mr. Bachman, writing of some that he took from a nest when very young and tried to rear in confinement, says: "They were sullen and cross, nay, three died in a few days, but the others having been fed on grasshoppers forcibly introduced into their mouths, were raised. a short time they began picking up the grasshoppers thrown into their cage, and were fully fed with corn meal, which they preferred eating dry. Their whole employment consisted in attempting to escape from their prison, regularly demolishing one every two days, although made of pine boards of tolerable thickness. I at last had one constructed with oak boards at the back and sides, and rails of the same in front. This was too much for them, and their only comfort was in passing and holding their bills through the hard bars. In the morning after receiving water, which they drank freely, they invariably upset the cup or saucer, and although this was large and flattish, they regularly turned it quite over. After this they attacked the trough which contained their food and soon broke it to pieces, and when perchance I happened to approach them with my hand, they made passes at it with their powerful bills with great force. I kept them in this manner until winter. They were at all times uncleanly and unsociable birds. On opening the door of my study one morning one of them dashed off by me, alighted on an apple tree near the house, climbed some distance, and kept watching me from one side and then the other, as if to ask what my intentions were. I walked into my study; the other was hammering at my books. They had broken one of the bars of the cage and must have been at liberty for some hours judging by the mischief

they had done. Fatigued of my pets I opened the door, and this last one hearing the voice of his brother, flew toward him and alighted on the same tree. They remained about half an hour, as if consulting each other, after which, taking to their wings together, they flew off in a southern direction, and with much more ease than could have been expected from birds so long kept in captivity."

The food of this species consists very largely of insects of various kinds, which it digs out with its powerful bill from their lurking places in the dead wood or beneath the bark of trees. It also eats fruit of all kinds, chestnuts, acorns and Indian corn. It is charged that it also destroys the ears of corn while yet in the milk, but there can be no doubt that its services to man in the destruction of noxious insects far outweigh any slight depredations which it may make on the crops. It is valueless for food, and is never killed except in pure wantonness, or by ornithologists.

The Pileated Woodpecker is eighteen inches in length, and measures twenty-eight across its extended wings. Its general color is deep glossy black in the male, but dull and smoky in the female and young. The whole upper part of the head is a bright carmine red. A broad band of black runs through the eye, becoming narrow on the forehead. There is a narrow line of white between this band of black and the red of the upper head. Throat white. Another band, yellowish at the base of the bill, and then changing to white, runs down through the cheek meeting the white of throat, and continues alongside of neck to the sides under the wing. Another broad band of red runs back from base of lower mandible. Under side of wing more or less white. The legs and feet are blue. Iris yellow. The female differs but little from the male, but has the band running back from the lower mandible, which is red in the male, grayish brown in color.

WILSON arrived in Philadelphia in 1794, and his first experiences of America were thoroughly disappointing. No employment could be secured at weaving, and although he took any work he could get, he found it very hard to make a living.

In the course of the next four years he tried his hands at many things, became a pedlar again, and was fairly successful, and was in turn copper-plate engraver, pedlar, schoolmaster, wandering a great deal, and in all his wanderings studying the habits of man and beast and bird, as far as he had opportunity, keeping a diary of his observations. As schoolmaster he used all his opportunities for self-instruction, and advanced considerably in mathematics, so that he was enabled to take up surveying, and add to his income by practicing it out of school hours.

But he drifted away from Philadelphia through New Jersey, and in 1801 we find him keeping school in Bloomfield, which he describes as "a settlement of canting, preaching and praying, and snivelling, ignorant Presbyterians, who pay their minister twelve hundred and fifty dollars a year for preaching twice a week, and their teacher forty dollars a quarter for the most spirit-sinking laborious work."

His bright dreams had become clouded, and he was meditating the possibility of returning to old Scotia, when he obtained a better appointment as schoolmaster on the Schuylkill, near Gray's Ferry, about four miles from Philadelphia.

In the first letter he wrote to his parents, after landing in America, he made mention of the birds, whose rich coloring had struck him as in strong contrast to the more sober plumage of birds of the old country, and in all his subsequent wandering he had made such notes of those he saw, as would

suggest themselves to a novice; but settled in his appointment on the Schuylkill, he soon made the acquaintance of his near neighbor, the venerable Bartram, a distinguished naturalist, who had a charming place on the western bank of the Schuylkill, known as "Bartram's botanical garden."

In this charming place, with his condition in life improved, and enjoying the daily intimacy of a man of Bartram's culture, life presented itself from quite a new and more cheerful aspect. He saw the amusement of his leisure subjected to order, and his newly-found friend, a master of the science, which he was both qualified to teach, and ready to impart to one who, like Wilson, felt a greater charm in the contemplation and study of nature than in the pursuits of men.

Mr. Bartram induced him to take up drawing, but his first attempts at landscape and the human figure discouraged him; however, he was prevailed on to make a second attempt on birds and other objects of natural history, and this time he succeeded altogether beyond his anticipations. But the duties of his profession appear to have occupied the whole day, his drawing was mostly done by candlelight, and that, he complained entailed the sacrifice of the pleasures of social life.

He consequently did not apply himself to this new study very assiduously; nevertheless he began to acquire proficiency, and, having an ambitious turn of mind, he compared his drawings with those in such works of natural history as he could get hold of, and the idea of illustrating the ornithology of the United States presented itself to him as a task he was capable of achieving.

Long and earnestly he pondered over the subject before he had sufficient confidence

to make it known to his friend, but at length the venerable Bartram was consulted, and to Wilson's delight and encouragement he not only entered warmly into the plan as tending to advance the study of natural history, but he freely expressed his confidence in Wilson's abilities and acquirements.

The scheme was now unfolded to Lawson, the engraver, with whom Wilson was on terms of intimacy, and met his approbation, but his calculations were a terrible damper on Wilson's sanguine anticipations, so much so, that there was a temporary coolness between them, but a little later Wilson wrote to him saying that he was bent on making a collection of all the birds in that part of North America, and begging him not to throw cold water on the seem-"I have," he ingly Quixotic scheme. wrote, "been so long accustomed to the building of airy castles, and brain windmills, that it has become one of my earthly comforts-a sort of rough bone-that amuses me when sated with the dull drudgery of life."

No plans were immediately matured as the result of this correspondence, but Wilson found heart of grace and began making a collection of birds in his neighborhood, and improving his talents as a draughtsman. His own sanguine temperament could not entertain the possibility of failure, but Mr. Lawson forced his attention to the many practical difficulties, and Wilson saw the expediency of going slowly, and making such progress as he could in his leisure, while still holding on to his school appointment as a means of subsistence.

This brings us down to 1804, at which period Wilson was so much immersed in his new pursuits that the schoolboys sought to win their way to his good graces by presents of dead crows, bullfrogs, and other similarly rare creatures. Writing to Mr. Bartram under date of March 31, 1804, he observes:

"I sometimes smile to think that while others are immersed in deep schemes of speculation and aggrandizement, in building towns and purchasing plantations, I am entranced in contemplation over the plumage of a lark, or gazing like a despairing lover on the lineaments of an owl. While others are hoarding up their bags of money without the power of enjoying it, I am collecting, without injuring my conscience or wounding my peace of mind, those beautiful specimens of Nature's works that are forever pleasing. I have had live crows, hawks and owls; oppossums, squirrels, snakes, lizards, etc., so that my room has sometimes reminded me of Noah's ark; but Noah had a wife in one corner of it, and in this particular our parallel does not altogether tally. I receive every subject of natural history which is brought to me, and although they do not march into my ark from all quarters, as they did into that of our great ancestor, yet I find means by the distribution of a few five-penny bits to make them find the way fast enough. One of my boys caught a mouse in school a few days ago, and directly marched up to me with his prisoner. I set about drawing it that same evening, and all the while the panting of its little heart showed it to be in the most extreme agonies of fear. I had intended to kill it in order to fix it in the claws of a stuffed owl; but happening to spill a few drops of water near where it was tied, it lapped it up with such eagerness, and looked in my eye with such a face of supplicating terror as perfectly overcame me. I immediately untied it, and restored it to life and liberty. The agonies of a prisoner at the stake, while the fire and instruments of torture are preparing, could not be more severe than the sufferings of that poor mouse, and, insignificant as the object was, I felt at that moment the sweet sensations that mercy leaves when she triumphs over cruelty."

A N interesting bird, called the Japim, a species of Cassicus, is found in the neighborhood of Para, Brazil. It belongs to the same family of birds as the starling, magpie, and rook, and has a rich yellow and black plumage, remarkably compact and velvety in texture. The shape of its head, and its physiognomy are very similar to that of the magpie; it has bright gray eyes, which give to it the same knowing expression. It is social in its habits, and builds its nest like the English rook, on trees in the neighborhood of man's habitations, but the nests are quite differently constructed, being shaped like purses, twofeet in length, and suspended from the slender branches all round the tree, some of them very near the ground. The entrance is on the side near the bottom of the nest. The bird is a great favorite with the Brazilians of Para; it is a noisy, stirring, babbling creature, passing constantly to and fro, chattering to its comrades, and is very ready at imitating other birds, especially the domestic poultry of the vicinity. There was at one time a weekly newspaper published at Para, called The Japim; the name being chosen on account of the babbling propensities of the bird. Its eggs are nearly round, and of a bluish-white color, speckled with brown.

The lower branches of the mangrove bushes, especially along the banks of the Magoary river, are frequented by the beautiful bird, "Ardea helias." This is a small heron, of exquisitely graceful shape and mien; its plumage is minutely variegated with bars and spots of a great many colors, like the wings of certain kinds of moths. It is difficult to see the bird in the woods, on account of its sombre colors

and the shadiness of its dwelling-places, but its note, a soft long-drawn whistle, often betrays its hiding-place. The Indians say that it builds in trees, and that the nest, which is made of clay, is beautifully constructed. It is a favorite pet bird of the Brazilians, who call it Pavao (pronounced pavaong), or peacock. It soon becomes tame, and walks about the floors of houses, picking up scraps of food, or catching insects, which it secures by walking gently to the place where they settle, and spearing them with its long slender beak. It allows itself to be handled by children, and will answer to its name "Pavao! Pavao!" walking up with a dainty, circumspect gait, and taking a fly or beetle from the hand,

Among nocturnal birds of Brazil the goat-suckers attract our attention. soon as it is dark, swarms of these birds suddenly make their appearance, wheeling about in a noiseless, ghostly manner, in chase of night-flying insects. They sometimes descend and settle on a low branch, or even on the pathway close to where one is walking, and then, squatting down on their heels, are difficult to distinguish from the surrounding soil. One kind has a long forked tail. In the day time they are concealed in the wooded hills, where the hunter sometimes sees them crouched, and sleeping on the ground in the dense shade. They make no nest, but lay their eggs on the bare ground. Later in the evening, the singular notes of the goat-suckers are heard, one species crying Quao, Quao, another Chuck-co-cao, and these are repeated at intervals far into the night in the most monotonous manner.

11

As I said before, there were two very different types of bird in those days, the divers and the flyers, and of course you want

to know
their
names,
but as

Marsh, their godfather, gave them the most learned names he could think of, they are rather hard to remember. The divers are called *Hesperornis*, and the high-flyers *Icthyornis*, and, if you know Greek, you will easily guess what the names mean. You see they are both called *ornis*, and *ornis* simply means a bird; *hesper* means western, and *icthy* means like a fish, so *Hesperornis* means the bird of the west; but to enable you to understand why they

called the other *Icthyornis*, it must be explained that it was not because it caught fish, but because it had back bones like a fish. If you have ever broken a fish's backbone you will have noticed that it is made of a lot of small bones, each of which is shaped like a cup

at both ends, but if you break the backbone of a bird or a hare, you will see that the several bones fit into each other by quite a different ar-

rangement. Now when you see a bird with a fish's backbone and a lizard's jaws, you must admit that you have a missing link that agrees very well with the theory that birds did not start into life suddenly, but were the descendants of a long line of ancestry which differ more and more from them as

you go further and further back in the family records.

The Hesperornis (you will remember that that is the western bird) was a big bird something like the great auk or the penguin, only it had absolutely no wings at all. Of course they went ashore on the rocks to lay their eggs and hatch their young, and as there were no seals nor sea lions in those days they had it all to themselves, but the greater part of their time was spent in the water. Their legs were

long and very strong, and when stretched out in diving, the bird was about six feet long. The skull was narrow like a lizard's, and they hadn't more than half as much brain as a loon, or

> any other living bird of their own size. Whatever changes living creatures have gone through since the world began, the highest types of every age have more brains than the highest types of earlier ages. The



head and jaw was about ten inches long; the lower jaw was armed with sharp pointed teeth over its whole length; the upper jaw had teeth too, but not in front. These teeth were not set in sockets like a horse's or a dog's, but in grooves like a reptile's, but the backbone was a genuine bird's. Like the

ostriches and other birds that are not made for flying, there was no keel on the breastbone.

While our friend the *Hesperornis* was diving after his dinner like a dart and making things lively among the smaller fishes, the *Icthyornis* sailed overhead on tireless wing,

pouncing down occasionally on any little fish

tured near the surface. The Icthyornis was comparatively a small bird. Two species have been discovered, one about the size of a plover, and the other nearly the size of an ibis or curlew. These birds had quite slender legs, like most of the shore birds and waders nowadays, and long powerful wings, and of course they had a keel on the breastbone, as that is necessary for the powerful muscles which keep the wings in motion. They had sharp teeth which curved back a little toward

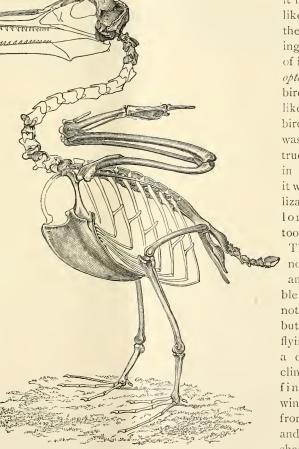
the throat, so that a fish had not much chance of breaking loose after the jaws once snapped on him, but although the *Icthyornis* had the marks of humble origin in its backbone, it had quite an aristocratic set of teeth, for each tooth was firmly set in its own socket.

A still more remarkable fossil bird called

the Archæopteryx has been discovered in Europe in a little earlier page of the earth's history. First the impression of a feather was found in the rock, recording as plainly as possible that the bird was there when the rock was soft mud. After a while a very complete specimen was discovered, and

wonderful to tell, it had a long tail like a lizard, and the feathers growing on either side of it. The Archaopteryx was a land bird and had feet like a perching bird, and the body was covered with true feathers, but in other respects it was more like a lizard with its long tail and toothed jaws.

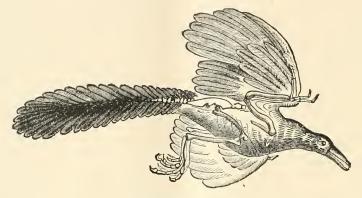
The wings were not very long, and it is possible that it could not fly upward, but only like the flying squirrels on a downward incline, and as the fingers of its wings were free from each other and armed with sharp claws, it must have been



SKELETON OF ICHTHYORNIS RESTORED, 1/2 NATURAL SIZE.

a good climber. And so we must admit that whatever may be thought of Darwin's theory of evolution, there is at any rate not a great dividing line which separates the reptiles from the birds, and that in this case the missing links are really just what Darwin foretold—creatures midway between the birds and reptiles.

Perhaps the generally accepted theory that change of life types from age to age is due to accidental variation, or to the inthe earth, this view is reconcilable with a great many of the facts, and generally accepted by the learned. But some boys now



ARCHÆOPTERYX RESTORED.

fluence of changing conditions, may not be the correct one. Like the early theories of the astronomers that the sun moved round at school may grow up like Newton to put forward a view which will agree with all the facts, and one which everybody will accept.

CHARLEY'S WONDERFUL JOURNEYS.

JOURNEY IX.

THE old man was sitting down by the edge of the lake leaning his back against a rock, apparently lost in thought; his eye fixed upon the reflection of the moon's rays upon the water. The moon was at her full, and slowly reaching the horizon as if preparing to plunge into the still waters of the lake, while from right beneath the pale orb of night, a long path of silvery light extended to the old man's feet.

As soon as the old man heard Charley's footsteps on the shingle he sprang to his feet, his face brightening until it shone like a second moon as he advanced to meet him.

"I have waited ten thousand years," he said, "and kept the boat ready all the time. I knew you would come at last. Now jump in."

"But where am I to go?" said Charley.

"You just steer right along the moonbeam's track," said the old man, "and you will reach the other side at the same time as the moon, and you have only to step ashore. Take these two flower pots, give one to the Man in the Moon, who is my son-in-law, and the other to the Maid in the Moon, who is my daughter, and tell them I am waiting for a tribute of their affection."

Charley jumped into the skiff as he was told, laid the two flower pots by his side, took the rudder, and glided away along the moonbeam's track.

As he approached, the moon began to grow bigger and bigger, and spread out on both sides of him as far as he could see, and when he came quite close he was on the other side of the water, and it was all moon.

Where he stepped ashore a broad roadway came right down to the water's edge; walls of solid rock bounded it on either side, making it look like a canal cut out of the solid rock. "You can never lose your way in a road like this," thought Charley, "and it must go somewhere."

He walked on and on a long, long way, and at last he came to the end, and there was an old man sitting down with a great lump of green cheese in each hand, and first he took a bite off one piece, and then off the other, and kept munching away all the time, without looking to the right or left.

At last he heard Charley's footstep, and turned round very angrily and tried to speak, but he couldn't at first his mouth was so full, but after he had cleared his mouth a little he spluttered out, "What do you want here? Go away."

Immediately he had spoken he thrust the last lump of green cheese into his mouth, and broke off a fresh piece from the ground in front of him.

"I am come from your father-in-law," said Charley, who sent me with this flower pot for a tribute of your affection."

"Wants some of my green cheese I dare say," said the old man as soon as he had cleared his mouth enough to speak. "He won't get any, though—I ain't his son-in-law—never married the Maid in the Moon—ain t such a fool—she'd have eaten more green cheese than I could—have eaten me out of house and home by this time—ain't such a fool, you bet."

He did not say all this at once, because he was eating away all the time, and breaking off fresh pieces from the road. When he got his mouth nearly empty he would say a few words, and then take a fresh bite, and munch away at that before he spoke again. He always spoke with his mouth full, and Charley thought it very rude, of course, but he did not like to say anything.

Charley sat still for some time, the old man munching away, and eyeing him all the while. Several times when his mouth was nearly empty he opened it wide and was going to speak, but habit was too strong for him, and before he could get out a word he always put up his hand and bit off another piece of cheese. But he did not like to have Charley sitting there, and kept eyeing him suspiciously all the time. At last he cleared his mouth enough to say, "What are you waiting for? Why don't you go?"

"I was waiting till you had done dinner," said Charley, "that I might talk to you."

"Done dinner!" said the old man as soon as he could, "What's that?"

"I mean," said Charley, "that I was waiting for you to finish eating."

"Finish eating!" exclaimed the old man, almost choking with rage and anxiety and green cheese all mingled: "Why should I finish eating? I suppose you want to begin eating, but I won't let you."

"I? Oh! no," said Charley, "I don't like green cheese."

"Don't you?" said the old man, shaking his head. "I wouldn't trust you. Now go away. The Maid in the Moon wanted to eat my green cheese. Drove her away."

"But isn't all the moon made of green cheese?" queried Charley.

"'Tisn't true," said the old man. "It's only in this line, and I found it, and I won't let anybody have any."

"But what will you do when it's all eaten?"

"All eaten!" exclaimed the old man, with horror on his countenance, "All eaten!"

"Why, yes," said Charley. "You've eaten out all the road from the beginning until now, and if you go on eating you must come to the end some time. But what's the good of always eating—you can't be always hungry?"

"But I am always hungry," said the old man, with his mouthful as usual, "eating always makes me hungry," and again he bit off great mouthfuls to make up for lost time. All the time he kept eyeing Charley very suspiciously. "Why don't you go away?" said he at length. "I don't want you to come here and say the green cheese must come to an end—I don't like it. Why don't you go and look for the Maid in the Moon? Go away."

"I suppose," said Charley, "she's at the other end of the green cheese, eating this way."

"What's that?" said the old man with such a start that he gulped down his mouthful, and fairly stopped eating. "I haven't seen the Maid of the Moon since the beginning, and do you say she's been at the other end of the green cheese, eating this way all the time?" With that he thrust another lump of cheese into his mouth, and began munching savagely, and looking down the canal as if to estimate how much green cheese the Maid of the Moon might possibly have eaten.

"If you like the green cheese so much why don't you see how far it goes?"

"You want me to go away that you may stay here and eat green cheese," said he, suspiciously, "but I won't go."

"I don't want to eat your green cheese," said Charley. "I'll go with you; perhaps we shall find the Maid in the Moon."

"Come along then," said the old man excitedly, climbing up out of the canal to the high ground. As soon as he was up he broke off a huge mass of green cheese from the yein, and began munching again.

Charley climbed up, too, and there, not fifty yards in front of him, the hard rock rose straight up in front of the green cheese vein.

"Why, there is the end of the green cheese," said Charley, pointing to the rock, "It doesn't go any further than that."

The man stuffed a fresh piece of green cheese in his mouth, broke off another piece, and ran over to the rocky ridge and examined it, but it was hard rock. Then he tried right and left to see if the green cheese vein had perhaps changed its course,

but it was all rock—hard rock. Then he tried to get behind the ridge, but there, too, was nothing but rock to be seen. A few more years and all his green cheese would be finished, and what would he do then?

As the truth gradually dawned upon him his agony was something dreadful to witness; the green cheese stuck in his throat, he gulped it down, raised another piece to his mouth, but his feelings were too much for him—he dropped the green cheese to the ground, put his hands to his face, and burst into a passionate fit of wailing and weeping.

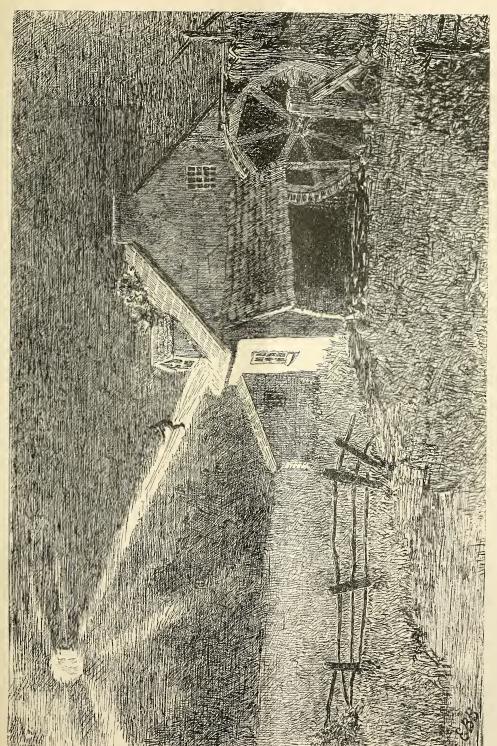
Charley thought this was a good time to go in quest of the Maid in the Moon, and away he started.

On he went over hill and dale, but there was nothing but hard flinty rock anywhere; not a tree, nor a plant, nor a blade of grass, not even a sign of green cheese, but after he had gone a long way he suddenly thought he detected the odor of roses and jasmines. He stopped, sniffed in the air, and found sure enough that it was laden with rich perfumes. He seemed to be entering another world, his step was elastic, he threw up his head, his chest expanded, his whole nature seemed to be lifted up, in fact he felt like a totally different being, and as he walked on eagerly he soon came in sight of a beautiful garden, full of manyhued flowers, exhaling the richest perfume.

As he drew nearer he saw the Maid of the Moon flitting rapidly about the garden, bending all the time over the flowers, but what she was doing he could not make out.

He drew nearer and nearer, and at last got almost close behind her without attracting her attention, and then imagine his astonishment to find that she was weeping a perfect shower of tears—actually watering the flowers with them.

She looked very young and nice; nobody would ever have thought that she was ten thousand years old, and Charley felt so



"I THINK I MUST HAVE DONE IT WHEN I WAS SLIDING DOWN THE MOONBEAM,"

sorry for her that he was almost ready to cry, too. At length he said:

Maid of the Moon, why do you weep? I have brought a flower pot and a message for you from your father."

"Dear old man!" exclaimed she, looking up with joyful surprise. She rained tears all the same, but her smile was so bright that her tears looked like manyhued gems as they fell. "Dear old man!" continued she; "let us come to the damask roses. I must weep tears of joy."

Away they ran to another part of the garden, at which the Maid of the Moon was no sooner arrived than her tears burst forth in a copious shower, and now Charley noticed that as fast as her tears fell flower buds appeared all over the bushes, and grew and burst, until in a few minutes the plot was one mass of brilliant colors, in which the damask far exceeded the green.

"I always like to come here first when I cry tears of joy, it gives the roses such brilliant hues, and makes them exhale such rich perfume, but now let us go to the carnations. Dear old father—Oh I'm so glad!"

"Do you never stop crying?" asked Charley at length, for he began to think that always crying must be almost as bad as always eating; at least it was not bad, he thought, but still he would not like to live with people that were always crying.

"Why should I stop crying?" asked she with surprise, and smiling gently on Charley through her tears, "If I give vent to my emotions of joy or sorrow my tears make the flowers grow, which makes the moon bright and beautiful. If I cry for sorrow, my tears bring forth such beautiful pure white flowers that my heart is glad, and then I cry for joy, and all the flowers spring up as brilliant-hued as they do now."

"But what makes you sorry?" asked Charley.

"In the beginning," she said, "when my father sent me here to marry the Man in the

Moon I was sorry because he would not let me live with him and eat green cheese, and I wandered away here, and sat down, and began to cry bitterly, and all the time I cried the flowers sprang up wherever my tears fell; pure white flowers with delicate perfume; then my heart was glad, and I began to cry for joy, and wherever these tears fell the flowers sprang up brillianthued. Then sometimes I felt sorry for the Man in in the Moon that he should spend all his time eating the horrid green cheese, which never satisfied his appetite, but deprived him of all the pleasures of life, and then when I've nothing else to be sorry for, and shed nothing but tears of joy, all the flowers become bright-colored, and I am sorry to miss my white flowers, and again I cry tears of sorrow. Thank Heaven there is always something to be sorry for. Don't earth children ever weep?"

"Yes," said Charley, "sometimes; if they're hungry they cry for their supper."

"Do they? Oh how nice! so do I. I'm getting hungry, too, and I am sure you must be; let us go to the supper garden and cry for supper."

So saying she took Charley's hand, and led him off to a grove like a plantain grove, and as soon as her tears began to fall the fruit ripened; bananas, mangoes, custard apples, bread fruit, and all sorts of nice fruit, but to Charley's dismay she only ripened one fruit at a time, and ate it as fast as it ripened.

"There, that's enough," said she at length, "let us go back to my flowers again. I suppose you are not hungry?"

Charley thought it very unkind of her that she did not give him any of the nice fruit, and when at last she was going away without even thinking of him he could stand it no longer, but burst into tears.

At once the bananas began to ripen, and when Charley looked up again there was a rich, ripe bunch close to his head, and he took the delicious fruit and ate it with appetite, but when he wanted some custard apples he could not cry any more, and had to go away, although his heart was full almost to bursting.

"Never mind," said the Maid of the Moon, "it's no good to eat for the mere pleasure of eating; when you are really hungry you can always cry for your supper."

"I wonder," said Charley, "whether it made the green cheese grow again when the Man in the Moon began crying?"

"What?" said the Maid in the Moon in a tone of excitement which showed itself in the brilliant flame-colored flowers that sprang up at her feet; "Is the Man in the Moon crying? Are you sure? Is the green cheese all finished?"

"It isn't quite finished," said Charley," but when the Man in the Moon got out of the ditch, and saw that there was an end of the green cheese he sat down and began to cry."

"And did he stop eating that horrid green cheese? Oh, do tell me all about it! and how he came to get up out of the ditch"

Then Charley told her everything that had passed between him and the Man in the Moon, and how he left him crying bitterly.

"Oh, I'm so glad!" she exclaimed. Those tears may be his redemption, if he only cry until he has a healthy appetite, and then cry for his supper, but perhaps he is gone back to his horrid green cheese again. I can wait no longer. Let us go and see, for he is my betrothed, and whenever he is cured of his craving for the horrid stuff that never satisfies, we shall be wedded in tears of joy."

Then she took the two flower pots that Charley had brought from her father, and planted a rose bush in one, and a plantain stalk in the other. She took the rose bush herself, and soon made the air fragrant with its perfume as she wept over it; the plantain she gave to Charley that he might

cry for his supper if he got hungry. Then they started to see how it was with the Man in the Moon,

When they came in sight of the spot where Charley left the old man crying they could see that it was deserted, but there was a thick clump of bushes with white trumpet-shaped flowers, and they hastened toward it, but as they approached they found the odor of the flowers worse than that of the green cheese, and tears of sorrow rained from the eyes of the Maid in the Moon, and fairly blanched the roses in the pot she carried.

They crept over to the edge of the ditch, and peeped in, and there was the old man munching away the green cheese as fast as he could, and looking ten times older and more miserable than ever at the thought that his green cheese would sooner or later come to an end.

As soon as he saw Charley and the Maid in the Moon his face grew green and horrible with rage, for he thought they had come to steal away some of his treasured green cheese; so they made haste to get out of his way, leaving a pathway of white flowers as they went.

At last Charley felt downright tired and hungry, and sat down, and wept copiously into the pot he carried. The fruit soon ripened, and he ate, and felt refreshed, but tired with his long journey.

"Now, earth child," said the Maid of the Moon sadly, "take the two pots, and go to my father, and tell him that my betrothed still lives for the indulgence of his appetite, but that the green cheese is nearly finished. Then give him this rose bush, watered with my tears, it will tell him all he wants to know of me. The plantain tree you may keep for yourself that you may always be able to get your supper when you cry for it."

"But how shall I find the boat again?" asked Charley.

"Oh, you needn't go back that way," said the Maid of the Moon; "It's much

easier to slide down on a moonbeam. Here, let me hold the pots while you get astride of this one."

Charley handed her the plantain tree, and got astride of the moonbeam, but directly he mounted he began to slide down at a rapid rate. The Maid of the Moon reached out the pots to him, but Charley had to hold on with both hands, and was already out of reach. The Maid wept copiously as usual, but you couldn't judge from that how sorry she was as she stood there holding out the two pots, while Charley was gliding down like a streak of greased lightning. Oh! what a delightful sensation it was, but it came to an end at last. After sliding so long that he never thought of coming to the bottom, he suddenly came

kerflop on the ground, with a shock that made him rebound like a rubber ball. This awoke him. He was lying on the floor by his bed. The moon was shining in at the window, and the moonbeam just reached to his feet.

He was soon asleep again, and when his mother came to wake him she took up his trousers, and noticed that the seam was split.

"Oh! Charley," said she, "why didn't you tell me last night?"

"But it wasn't torn last night," said Charley.

"Then, when did you tear it?" asked his mother.

"I think I must have done it when I was sliding down the moonbeam," said Charley.

C. F. AMERY.

WRENS IN A COFFEE POT.

COME time ago two wrens entered my cabin through some of the numerous cracks, and set to work exploring it. I sat still at my table watching them. Their behavior showed that they were hunting a place to nest. They peeped into every nook and corner, and finally left in a way that seemed to show that they thought they might be able to find better quarters elsewhere. However, in half an hour they returned and began their examinations as before. This time they seemed to reach the conclusion that my cabin would be a desirable place, provided I would move out of it. Having no intention to do this, but wishing to do all I could to please the little birds, I seized an old coffee pot and hung it on a tree near my door, tying it firmly so that the wind would not shake it. In a little while the wrens discovered it and entered it. It appeared to strike them at once as a charming place, a veritable palace, suitable as a residence of the most exacting aristocrats. From their maneuvers

they evidently thought they had struck it very rich, and blessed their stars for so good fortune. I must confess that I too felt quite a degree of pleasure in perceiving how happy I had made my little visitors. And yet it had all been done by fastening an old worn-out coffee pot in a tree.

In a little while they were busy transporting leaves into the coffee pot, the male laboring as heartily as the female. This shows that he perfectly understood what was going to take place, and what duty demanded of him as a little man. Next day the nest was finished, and it was curious to observe how soft and comfortable they had made it. Inside they had lined it thickly with bits of feathers, shreds of wool, and downy substances picked from the wild flowers; so that to the finger it felt like rich velvet. The next day I found a tiny egg in the nest, and another the day following. After this I failed to count the eggs; for when I looked again a few days afterward the little dame was sitting, and I would not disturb her. The eggs are white, sprinkled with little brown spots, and they seemed to me very cute.

Now the capers of the little man began to amuse me. Before this, so far as I had known, he had been songless, but now I was frequently called to my door to listen to his singing. He would perch on a branch just above the coffee pot, and pour out strain after strain of most honeyed sweetness, of such melody as no language could give an idea of. He was singing to his love to cheer her in her long and tedious sitting, and that his strains warmed and thrilled her little heart with drops of the sweetest pleasure, permeating every nerve of it, who can doubt? I do not doubt that while she was drinking these in, her little heart was almost bursting with nuptial love, and with the conviction that her little man was just the darlingest love of a fellow in all the world. After thus singing a while he would dart away into the woods.

Only three or four days after the sitting began I was surprised to see one of them enter the coffee pot with a worm in his bill. I thought it marvelous that their eggs should hatch so soon. I waited until this wren had flown away, and then went to the nest expecting to see it full of their babies: but instead, there sat the little dame. And this shows that the thoughtful little man was not only making music to cheer her little heart, but was feeding her while she sat, so that she should have no troubles or cares while engaged in that business. watched him much afterward, and often saw him bearing in his bill some choice bit for her. I dare say whenever he found a particularly choice morsel in the woods he never ate it himself, but immediately hurried off, with his heart full of happiness, to bear it to his lady love. He is indeed a model little husband, and she a most true and affectionate little wife. What happiness must reign in their household!

And now that their little ones have come, I learn yet another way of this gallant and faithful little fellow. Both now engage in feeding their young; for I judge that the little wife out of her loving heart thinks it would be too hard a task for her little man to feed the whole family without help Therefore she sets to work equally with him, and between the two no doubt the little ones are fed. usually start from the nest together, but it seldom happens that they return together. When the little man returns first, and has delivered his offerings to the nestlings, he jumps out on a branch and waits for his mate. If she comes not very soon, he grows impatient and calls for her very distinctly. Her name by which he knows her seems to be Titty-tee; for he calls out in a most musical voice as loud as he can: "Tittytitty-tee, ah, Titty-titty-tee!" and he repeats this time after time till Titty-tee comes. That he intends this as a call for her seems certain, for he sings entirely differing notes when she is present. Indeed, this musical little lover has quite a multitude of songs, and they are all exquisitely turned. mate does not sing, though I often hear her answer him with a peculiar note when he calls. When Titty-tee comes and has presented her gifts to the little ones, they hop about in the tree together a little while, seeming to be greatly happy, and then dart away into the woods for more Can any one study the ways of these sweet little creatures without loving them? I judge not. And if he take not care some drops of their sweetness may perchance fall into his own heart, and help to sweeten that, too. I have reason to believe that the marriage of these little birds is not for a season, but for life.

This is not the little brown wren I was familiar with when a boy in North Carolina. This one has a longer bill, crooked like that of the curlew, and is much on the order of that of the hummingbird. He

has also a longer tail. The brown wren of the East is, I think, brown all over. This one has a lead-colored breast and belly. The other brown wren is a chubby little fellow, and about as round as a bullet, and not much bigger. The body of this one is no bigger, but is longer. Their notes are entirely different. I think this wren is probably peculiar to western Texas and Mexico.—N. A. T. in Forest and Stream.

A TRIP TO THE YOSEMITE VALLEY.

HAVE just returned from a long drive up the mountains to Redwood district, a country of great trees, some of them six to eight feet in diameter, which compare favorably with the Mariposa and Calaveras trees. We picnicked in an open field fairly deluged in wild flowers. Fancy lying on a soft bed of wild flowers of every color and family with trees of eight feet in diameter for shade! Such was our agreeable experience on a fine, warm, sunny day with the blue Pacific in sight, and the delicious mountain air filling our lungs. Oh! the birds and the flowers! It seems as if I could not cease writing of them. I did not believe it possible that anywhere in the world there could be such a paradise. As in the rich valley of San Joaquin and that of San Gabriel, the little field larks sang loudly to us. They must have been glad also to see us enjoy ourselves like so many children, for they sang most enchantingly. Music suggests music, and far away, we thought of "Thomas," but in the end unanimously decided to give the palm to the little miniature bird orchestra of larks gathered around us, their little throats swelling with melody, piping their sweet hymns of praise to the God of day. We leave here to-morrow for the Yosemite Valley. I will write to you from there.

YOSEMITE VALLEY, CAL.—We went to the foot of the Lower Yosemite Fall (500 feet), and gazed at its wonderful beauty and bathed in its mist; the path to the Fall leading through beds of wild strawberries, just ripening, and so round, cross-

ing the river again close by Barnard's hotel (late Hutchings'-our fellow traveller on the stage). I must here stop to tell you something about the woodpeckers which old Hutchings told us on our route. He says the woodpeckers—birds which we met constantly on our journey to and through the Valley-are "characters" in their way. Among other curious things that they do may be mentioned the following as being interesting, I think: Mindful of the winter months when food will be scarce, they pick up acorns during the season when the oaks are shedding, and put them into holes which they bore in the pines with their long beaks, and when the icy months come and there is nothing else for them to eat, they go in flocks and gather these acorns, which, as each one contains a worm, afford them a delicious and ample supply of food for the hard season. And they have to fight often for this very food which they have so carefully and prudently garnered up, for they have an enemy in the squirrel—little rascal!—who, too lazy and too improvident himself to provide ahead for his wants, will forage on his neighbors, and there is eternally warwar to the knife—between the woodpeckers and the squirrels in consequence. Their bloody battles are often watched, and are, as a matter of course, very interesting indeed. Five or six woodpeckers are often seen attacking one of their thieving foes, who nevertheless will often, in spite of their odds, succeed in capturing the choice morsels so cleverly stored away by the industrious little fellows

BIRDS IN DISGUISE.

THE following is the list of birds veiled in the anagram in our June number. The first five correct solutions received in our office reached us in the following order:

Mrs. E. A. Foster, New York city; Jerome Trombley, Petersburgh, Mich.; Walter B. Savery, Salem, Mass.; Miss Margaret F. Boynton, Lockport, N. Y.; Russell W. Taft, Williston, Vt. Several other correct solutions were received, with two or three in which "rock crane" was incorrectly given for corn crake.

- 1. Granite den soup.
- 2. Go mind brick.
- 3. T my wise finch.
- 4. Blow direly.
- 5. Retort riven hang red
- 6. Do keep crow.
- 7. Drink big. 8. Our sea eggs.
- 9. Boil knob.
- 10. Rush the mirth.

- 1. Pinnated Grouse.
- 2. Mockingbird.
- 3. Chimney Swift.
- 4. Yellowbird. 5. Great Northern Diver,
- 6. Woodpecker.
- 7. Kingbird.
- 8. Sage Grouse. o. Bobolink.
- 10. Hermit Thrush.

- 11. R. dug moonvine.
- 12. Nib's word.
- 13. Her rain pie. 14. U. go defer surf.
- 15. Magpi rant.
- 16. A Turk age.
- 17. Sling in sheep.
- 18. Grow, parsons!
- 19. Make a world.
- 20. Dryer birch.
- 21. Pawling. 22. Try! Gap! Roar!
- 23. Whirlpool Pi W.
- 24. Alan's children.
- 25. Sabre! Rend! Obia R.25. Robin redbreast.
- 26, Who bit B. E.?
- 27. Pain's perd.
- 28. Girls tan.
- 29. Grin him dumb!
- 30. Long brace O sea!
- 31. Reduce kid.
- 32. Heed larks.
- 33. Bask, Radical Negro!33. Cardinal Grosbeak.
- 34. Near crock.
- 35. Shirt Co.
- 36. Lub Bride.

- 11. Mourning Dove.
- 12. Snowbird.
- 13. Prairie Hen.
 - 14. Ruffed Grouse.
 - 15. Ptarmigan.
 - 16. Great Auk.
 - 17. English Snipe. 13. Song Sparrow.

 - 19. Meadow Lark. 20. Cherrybird.
 - 21. Lapwing.

 - 22, Gray Parrot.
 - 23. Whippoorwill. 24. Sandhill Crane.

 - 26. Bob White.
 - 27. Sandpiper.

 - 28. Starling.
 - 29. Hummingbird.
 - 30. Barnacle Goose.
 - 31. Eider Duck.
 - 32. Sheldrake.

 - 34. Corncrake.
 - 35. Ostrich.
 - 36. Bluebird.

A VISIT TO AUDUBON'S HOME.

I N her entertaining narrative of the life of Audubon, Mrs. St. John mentions an estate or "plantation" on the Perkiomen as having been occupied by Audubon while he was a resident of Pennsylvania,

A short time since it was the writer's fortune to visit this historic spot, and it may interest admirers of the great naturalist to know something of his old home as it now appears. It is to-day one of the finest among the many splendid farms in a region noted for fertility and beauty.

The valley of the Perkiomen Creek is surpassingly attractive in itself. The left bank of the stream, from its confluence with the Schuylkill as far as the eye will reach, is flanked with a thickly wooded ridge, rising in places abruptly from the water's edge, with many evergreens showing here and there among the more numerous deciduous trees.

Along the opposite side are lovely meadows stretching away far and wide, over which flocks of sheep and cattle roam and feed contentedly and luxuriously, or rest in the generous shade of trees that, from their great size and age, must have graced the landscape in Audubon's time, the whole scene presenting a charming picture of rural peace and plenty.

Local history tells us that here, about the beginning of the present century, Audubon laid the foundation of his great work, here also on April 8, 1808, he married Lucy Bakewell, and here too his eldest son was born.

Preparatory to his removal to Kentucky the naturalist disposed of the farm to Joseph Williams, of Whitemarsh, from whom it passed into the possession of M. R. Ambler, Esq., the present owner.—IV. D. Zimmerman in Forest and Stream,

THE AUDUBON NOTE BOOK.

MEMBERSHIP RETURNS.

THE registered membership of the Society at June 30 was 47,095, showing an increase of 611 for the month, due to the following sources:

New York	56	Mississippi	I.O
Maine	1	Kentucky	I
New Jersey	61	Arkansas	I
Connecticut	36	Dakota	4
Vermont	II	Wisconsin	157
Rhode Island	7	Missouri	1
Massachusetts	45	California	20
New Hampshire	5	Maryland	10
Pennsylvania	69	Virginia	17
Ohio	3	Florida	I
Illinois	21	Canada	29
Michigan	2	England	1
Minnesota	8	East India	I
Nebraska	33		
			611

C. F. AMERY, General Secretary.

ROBIN LOTHARIO.

Editor Audubon Magazine:

Farmer Geo. P. Smith of ———, Pa., has been for years a staunch bird protector like his neighbor, James Hixenbaugh, aged seventy. Two weeks ago the writer was a guest of Mr. S., and our after-dinner stroll included a visit to Jim's place. Jim's crops were in excellent condition, being chiefly of the cat and thistle bird varieties, interspersed with robins; and these hedged in with thrushes, larks, etc.

"You see," said Jim, "we've no cats or dog to scare the birds, and I like to hear 'em singin' round the house;" then he led the way to the subject of this letter.

Halting within ten feet of the front porch he spread apart the top of a bush and exposed to view a nest, on which lay three young birds; these infants he tenderly removed, and we saw that the nest was full of eggs.

Now, three weeks before, two female robins commenced to build in this bush, and the work progressed smoothly enough until they met at the nest; then sparring for an opening, they knocked the building material from each other's mouths, clinched and fell to the ground. Hostilities were suspended by Sheriff Jim's approach, and work was presently resumed; but they met again, and then another disgraceful affair, and a dozen or more such rounds were fought before the nest was finished. A struggle now ensued for first occupancy, and the unsuccessful bird deposited her egg on the ground; but friend-in-need Jim placed it in the nest. A third egg was laid, and when the alternate bird arrived, she saw that "raise," and went one or two better;

and so the game proceeded, and the stakes increased until the pool was valued at eleven eggs, by actual count of Banker Hixenbaugh. Of course the hatching was initiated by a row, and during this scuffle an egg was jostled out, which Jim appropriated—his ten per cent. commission. In due course of time three young appeared and now, for the first time, Mr. Robin showed preference—for the presiding mother, (and which one was it?) Occasionally (and to his credit be it recorded) he fed the children; and ever, while he sought the market for fresh supplies, the jilted bird appeared with worm in mouth, but forced (alas!) to retire on account of her savage rival. Thus affairs were pending that pleasant June afternoon.

"What do you think of this, Jim?"

"I believe," stroking his beard and looking over his spectacles at the speaker, "it's a clear case of one man with two wimmin."

No covert humor in his tone nor trace of any smile upon his face; perhaps he, too, was touched by the pathos of it all. Poor wifey No. 2! was she not entitled to a portion of the brood? or at least she might have been allowed to cater to the nest; that nest in which she held both stock and heart in trust.

"The nest is full now," continued Jim, "and I'm going to rig up some grass about it; then if any more eggs hatch out mebby the other female will have a chance to do some feedin'."

Fancy eight or ten such youngsters, all openmouthed, around that center table, impatiently waiting there, and the mammas bitterly striving to serve the first course of deliciously fat grub worms.

PITTSBURGH, June 16. R. H.

SONG OF THE WHIPPOORWILL.

Editor Audubon Magazine:

We moved to our farm here in Northern Pennsylvania this spring. We enjoy our rural home constantly. The lovely views, the succession of beautiful flowers in woodlands, meadows and by road-sides, these with the birds are a constant delight. A pair of kingbirds have their nest in an old pear tree close to the house. The nest is on a large limb, some distance from the ground, and near the tip of the limb. We have enjoyed watching them, sitting or standing in the open door; with the field glass we were able to bring them very close to us, so as to see every turn of the eye. The young brood require a great deal of attention now. The parent birds keep up a constant fluttering over the nest, first one and then the other returns from gar-

den or meadow with insects. I see them a great deal in the vegetable garden walking between the "green things growing," and their search seems to be rewarded very soon. There are some small dead limbs on their old pear tree. These are always selected by them to perch on. We never see them sit among the leaves. We are enjoying "Fifty Common Birds and How to Know Them;" I think it will be a great help. But more than anything else we have enjoyed the song of the whippoorwill. This is a most charming vesper song. Happy the man who, leaning on his pasture bars, hears in the "gloaming" this clear whistle coming up to him from the gathering shadows in the valley below. But it is most pleasing to those who having heard it in childhood, and not having heard it for years, come to hear again the wild, sweet, well-remembered notes. How the old memories come thronging back! We sit out on the lawn in the cool of the day, or lounge in the hammock and listen. Now, one note, clear and distinct, sounds out alone, then by twos and threes, then all together. We have but to close our eyes and we are back in our childhood, sitting on the porch. Father has come in from some late chores, and pausing on the porch has said, "Come out and hear the whippoorwill." We sit there in the gathering gloom, and hear the song coming up to us through the fragrant air from the swamp below. Well may we pray with the old man in Dickens's "Christmas Tale," "Lord keep my memory green." Later on in the evening the one who is reading aloud to the family pausing says, "Hark! How plainly you can hear him now." Still later, when the lights are out, and the house still, there floats through the closed blinds on the breeze that fans this "heaven-kissing hill," the same half plaintive note. It comes deliciously sweet to our drowsy senses, then faint and fainter till it mingles with our dreams, as we once more (as we only can in dreamland) walk with those who have "sailed beyond the sunset and touched the happy isles." UPLANDS, Pa. LUCY LYMAN PECK.

A TRUE INCIDENT.

A LADY and a little girl were looking through a box filled with artificial flowers, feathers and birds for hat trimmings. The lady was well educated, and had always lived in a happy and refined home. The little girl was less than seven years old, and had spent the first part of her short life in a home of destitution and degradation until it became at length necessary to break up the poor family and send her to the "Children's Home" of a county poorhouse. This kind lady, whom the child was now visiting had taken her from the "Home," and they were now engaged in choosing from the box

something for the trimming of a summer hat for the little girl. The lady had long heard of the Audubon Society's protest against the wholesale slaughter of birds to satisfy the demands of fashion. The child was ignorant of it all, and poor, and to her these bright things were rare and tempting treasures.

"Let's put this pretty feather on the hat," said the lady.

"Poor birdie," said the child, "what made you kill it?"

"I did not kill it," was the reply.

"Who killed the birdie, then?" said the little girl.

"I don't know; a man did, I suppose."

"But," said the child, "what made you let the man kill the poor birdie?"

"I could not help it."

The little child looked up, and then said seriously, "You hadn't ought'er take any feathers from the man that killed poor birdie." The lady was silent, and trimmed the hat with a flower. H. N. D.

SWALLOWS AT SEA.

A RATHER curious episode in natural history occurred the other day on board the French steamboat Abd-el Kader during the passage from Marseilles to Algiers. Just as the vessel was about two hours out the skies became quite black with swallows. It was then about six o'clock in the evening. The birds alighted in thousands on the sails, ropes and yards of the Abd-el-Kader. After a perky survey of the deck from their eminences aloft, they descended coolly on deck, hopped about among the sailors and passengers, and eventually found their way into the cabins both fore and aft. The birds were evidently fatigued after a long flight, and allowed themselves to be caught by the people, who gave them a welcome reception and provided them with food, which they enjoyed heartily. The little winged strangers remained all night on the vessel, and in the morning at seven o'clock the head lookout bird had, no doubt, sighted the Balearic Isles, for the whole flock made for land, after having spent a comfortable and refreshing night on board ship.

MRS. SOMERVILLE AND HER BIRD.—Mrs. Somerville, the well known English woman, writing in 1869 says: "I have still the habit of studying in bed from eight till twelve or one o'clock, but I am left solitary, for I have lost my little bird who was my constant companion for eight years. It had both memory and intelligence, and such confidence in me as to sleep upon my arm while I was writing." Yes, birds have no instinctive fear of man, and will not fly from his approach until after they have learned by experience that he is not to be trusted.

EMINENT PEOPLE ON BIRD PROTECTION.

OAK KNOLL, Danvers, Mass.,) 2nd mo., 20, 1886.

Editor Forest and Stream:

I heartily approve of the proposed AUDUBON So-CIETY. We are in a way to destroy both our forests and our birds. A society for the preservation of the latter has long been needed, and I hope it is not too late for the accomplishment of its objects.

I could almost wish that the shooters of the birds, the taxidermists who prepare their skins, and the fashionable wearers of their feathers might share the penalty which was visited upon the Ancient Mariner who shot the Albatross. Thy friend,

JOHN G. WHITTIER.

BROOKLYN, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I am heartily in sympathy with your purposes for the protection of birds, and should be glad to contribute any influence that I can to that end.

If there were no purchasers there would be no demand, and no reason for slaughtering these winged gems. But as only women create a demand, it rests upon them to stay this wanton destruction. I am sure that it is only necessary to bring before American women the cruelty of this "slaughter of the innocents" that fashion is carrying on, to secure a renunciation of this ornament and the salvation of

On this subject the kind feelings, the taste, and æsthetic sympathy of the whole community are on your side, and if you persevere you will surely win.

HENRY WARD BEECHER.

CORNWALL-ON-HUDSON, N. Y., ? Feb. 22, 1886.

Editor Forest and Stream:

You have indeed my hearty sympathy in every effort to prevent the slaughter of my innocent little neighbors and friends, the birds. In the destruction of forests and birds, the people of this land are inviting very great evils and inflicting wrongs on posterity which scarcely can be measured. The press should render it impossibe for women to sin thoughtlessly and ignorantly in demanding little birds for their adornment. The evil should be brought home so fully to the knowledge of all, that the continued wearing of our useful little birds should become the badge and indication of a callous, vulgar nature. You are doing a humane and patriotic work in exciting public aversion to one of the most cruel and stupid wrongs of the age.

Respectfully yours,

EDWARD P. ROE.

WEST PARK, N. Y., Feb. 20, 1886. Editor Forest and Stream:

I scarcely need assure you that your undertaking to form a society for the protection of our wild birds against the ravages of the milliners and the sham scientific collectors has my warmest sympathy and approval. It is a barbarous taste which prompts our women and girls to appear upon the street with their head gear adorned with the scalps of our songsters; and it is mere vanity and affectation which prompts so many persons to make up cabinets of the nests and eggs of the same. The destruction of our birds from their natural enemies is immense, and this craze of the collectors, and folly of the milliners and their customers in addition, threatens their serious diminution.

I hope you may succeed in creating so strong a public sentiment upon the subject that the collectors of skins and eggs for the unworthy purposes of fashion or to indulge the vanity of pseudo-naturalists may suddenly find their occupation gone.

Please add my name to the list of the members of the Audubon Society. Very sincerely,

JOHN BURROUGHS.

160 W. 59TH STREET, NEW YORK, Feb. 20, 1886.

Editor Forest and Stream:

No one who will take the trouble to give the matter a few moments' serious consideration can be in doubt, I think, as to the wisdom of organizing the AUDUBON SOCIETY, and I am thankful that such a step is contemplated. There is an element of savagery in the use of birds for personal decoration, which is in grotesque contrast with our boasts of civilization. But even the savage stops short, as a rule, with the feathers. It is only Christian people who think it worth while to butcher a whole bird to adorn their head gear. I am sure, however, that this is largely from that unreflecting habit which is a leading vice in people who follow the fashions. But it is a vice; as Hood sang, when he wrote-

For evil is wrought By want of thought As well as by want of heart.

If the AUDUBON SOCIETY can teach men, and especially women, to think on this subject, half of the battle will have been won. HENRY C. POTTER.

ANDOVER, Mass., Feb. 21, 1886.

Editor Forest and Stream:

I am in earnest and indignant sympathy with the motive of any society organized to prevent the murder of birds for decorative purposes.

E. S. PHELPS.





THE TOWHEE BUNTING.

THE AUDUBON MAGAZINE.

VOL. II.

SEPTEMBER, 1888.

No. 8.

THE TOWHEE BUNTING.

NE of the most abundant summer birds of middle North America is the Ground Robin, Chewink or Towhee Bunting. Although so numerous in our forests and along the hedgerows, it is yet a bird known to few persons except those who make a study of our feathered visitants. It comes quietly in the spring, and, seldom appearing in the fields or about the houses, at once betakes itself to its chosen haunts along the edges of the woods. A favorite resort for these birds is one of the rambling, grass-grown woodroads or cart paths which so often traverse our New England woods. The narrow track is verdant with fresh grass, and on either side near the tumble down stone walls or rail fences, which bound the road, the ground is overgrown with cedars and sumachs, and these are matted together with thorny catbriers. It is under and among these tangled growths that the Towhee Bunting delights to dwell, and if you go along carefully and quietly any bright summer morn ing or evening you may hear him busily at work on the ground, scratching among the dry leaves in search of food, or if it is the mating season you will come upon him seated on the lowest branch of some overhanging chestnut, and trilling the simple lay which cheers his mate while she broods her eggs not far away.

The Towhee Bunting makes its appearance with us in the latter part of April,

having passed the winter in the Southern States, where it is found everywhere at that season of the year. Its migrations are performed slowly by short flights, and its wing beats are so rapid that sometimes they may be heard at quite a little distance. At this time it is a busy, restless bird, seeming unwilling to remain quiet for any length of time, and appearing to be impressed with the notion that it must hurry on to its journey's end. And yet for all its apparent haste it seems to loiter. When the Towhees reach their breeding places they arrive singly, never moving in flocks, the males coming first and dispersing themselves over the country, to be followed a little later by their more plainly clad mates.

Soon after the arrival of these latter the birds choose their mates. A site for a nest is selected, usually at the foot of some bush or very young tree, sometimes close to a tuft of high grass; and now both the mates take part in the labor of making the nest. This is begun by scratching out a hollow in the ground as large as a good sized tea cup. This hollow is then lined with dried grasses, and slender weed stalks, sometimes with dried leaves, and over this, to form the real lining of the nest on which the delicate eggs are to rest, are finer grasses, fibrous roots, and sometimes horse or cow hair. The whole is a most compact and comfortable structure, and it is generally well protected from danger of

discovery by the grass and growing leaves and twigs which surround it. In this nest the female lays from four to six closely speckled or mottled eggs. If disturbed during incubation she usually manages to slip off her nest unobserved, and to run some little distance through the grass before taking flight, and is thus sometimes able to throw the observer off the track as to the true location of her nest. Usually, however, this is readily discovered, owing to the habit of choosing a location for it close to some rather prominent object.

The nest of this species is exposed to more dangers than those of tree inhabiting species. Snakes discover and devour both eggs and young, and sometimes the old bird as well, and skunks and foxes also prey upon them, while crows and jays are unremitting enemies. The cow bunting often chooses the nest of the Towhee as a cradle for its egg, and we have found a nest which contained three of the latter. and four which belonged to the owner of the structure. Although the Towhee during the breeding season at the north has only natural enemies to fear, yet when forced south by the approach of winter, this bird is eagerly sought for as an article of food. In Louisiana, where they are very abundant during the fall and winter, they become extremely fat and are shot and sent to market in great numbers. they are known as Grassets, and are greatly esteemed for the table, being regarded by epicures much as is the ricebird or bobolink in other localities.

Still, notwithstanding all the enemies against which they have to contend, the Towhees seem to hold their own pretty well, and are very abundant.

The Towhee Bunting is at all times an active, graceful bird, and its long tail bordered with white is conspicuously flirted about as it hops or runs along the ground, or passes by short flights from bush to bush.

In the Northern States the eye of this

bird, when it is adult is usually of a bright red color, that of the young bird being brown. Sometimes, however, the two eyes are of different colors, one being red and the other brown. Wilson speaks of an individual which had one eye red and the other white, and Mr. Allen has described a variety from Florida which has both eyes white.

The names Chewink and Towhee are given this bird from a fancied resemblance of its cry to these syllables. In the West its common cry of anxiety or alarm is not unlike the common note of the catbird, and resembles the mewing of a kitten.

The Towhee Bunting belongs to the genus *Pipilo*, of which there are in North America fifteen or eighteen species and varieties scattered all over the breadth of the continent. They are birds of rather southerly distribution, and only two or three species pass over the border line of the United States into Canada. Most of those found east of the Main Divide of the Rocky Mountains bear a general resemblance to our eastern bird.

The Towhee Bunting is eight and onehalf inches long, and measures twelve inches in extent of wing. Its bill is conical and very robust, the wings short and rounded, and the tail long, expanded toward its end and then abruptly rounded. The bill is black, and the eyes bright red. The legs and claws are pale flesh color. The head, neck and upper parts in the male are black. There is a narrow white band across the wing, the outer edge of the first quill of which is white. The margins of some of the secondary feathers are white. The outer tail feathers are mostly white, and are conspicuous when the bird is in flight; the next two have also some white on them near their extremities. The breast is white, the sides rich brownish red. and the belly pale red. The female differs from the male chiefly in having the black of the latter replaced by brown.

IV.

WILSON soon found that he could not indulge in his favorite pursuits consistently with his conscientious discharge of his duty to his pupils. dream of writing and illustrating a work on ornithology, once it had taken definite shape, and presented itself as a task within the compass of his abilities, became the one idea of his life, to which every other consideration must be subordinated, and to give effect to it, it would be necessary to resign his school appointment. no hesitation in making the sacrifice, but before cutting himself adrift he prudently looked about for some means of providing for his necessary expenses. He applied to Mr. Brown, the conductor of the Literary Magazine, who accepted his "Rural Walk" and "Solitary Tutor"-two poetical pieces, the latter being descriptive of his own career, his early preparation for the church, his disappointment at being diverted into another and less congenial channel, his struggle to emancipate himself, his emigration, his school house on the Schuvlkill, and his favorite haunts in Bartram's woods.

The acceptance of these pieces encouraged him to make a journey on foot to the Falls of Niagara, which he accomplished along with two friends, starting in October, 1804. The lateness of the season exposed them to many hardships on the return journey, a distance of over six hundred miles, which he describes as in great part "through deep snows and uninhabited forests, over stupendous mountains and down dangerous rivers."

This journey neither satisfied nor discouraged him, on the contrary, it appears only to have awakened in him a real design of becoming a traveler, and by his acquisitions adding something to the common stock of knowledge, but he realized keenly

his deficiency in many acquirements necessary to an explorer, especially in botany, mineralogy and drawing, and meditated a preparatory course of study of these subjects, consulting his friend Mr. Bartram as usual.

This, his first journey in the pursuit of material for his natural history, is described in the poem of the "Foresters," afterward published in the "Portfolio," and furnished the materials for his beautiful description and poem of the bald eagle and fish hawk. Other journeys were undertaken in the following year, the most patent and immediate result of which was the destruction of the success of his school. His own neglect was aggravated by the severe winter of 1805, which pressed hard on the settlers.

Writing to Mr. Duncan at its close he says: "This winter has been entirely lost to me as well as to yourself. I shall on the 12th of next month be scarcely able to collect a sufficiency to pay my board, having not more than twenty-seven scholars. Five or six families who used to send me their children have been almost in a state of starvation."

Wilson still remained at Union School, and "managed to maintain himself honestly," as his biographer tells us, but he could not give up the design of illustrating the birds of the United States, though prudence, represented by Mr. Lawson's calculations, still forbade the scheme.

On July 2 of this year he wrote to Mr. Bartram, "I dare say you will smile at my presumption when I tell you that I have seriously begun to make a collection of drawings of the birds to be found in Pennsylvania, or that occasionally pass through it. Twenty-eight as a beginning I send for your opinion. They are, I hope, in-

ferior to what I shall produce, though as close copies of the originals as I could make. One or two of these I cannot find either in your "Nomenclature" or the seven volumes of Edwards. Any hint for promoting my plan or enabling me to execute better I will receive from you with much pleasure. Criticise these, my dear friend, without fear of offending me. This will instruct, but not discourage me. your advice and encouraging encomiums I am indebted for these few specimens, and for all that will follow. They may yet tell posterity that I was honored with your friendship, and that to your inspiration they owe their existence."

Expressions such as that given above in italics indicate that in spite of his enthusiasm and no mean measure of self-reliance, there was in Wilson a tendency to so modest an appreciation of his own abilities, that at this decisive stage of his career he would hardly have ventured on the struggle for the consummation of his dreams unless encouraged by those in whose judgment he had implicit confidence.

But now a circumstance arose which prevented him from putting his design in immediate execution, and which, perhaps, as suggested by his biographer, favored his success indirectly by hindering him from commencing on his own inadequate resources.

Mr. Jefferson, the then President of the United States, had it in contemplation to dispatch an expedition to explore the country of the Mississippi, and Wilson sought to be appointed as a naturalist to the party. He applied to Mr. Bartram, who cheerfully wrote to the President, recommending his friend, and Wilson forwarded the letter with a communication from himself, in which he set forth that he had been several years engaged in collecting materials and furnishing drawings with the design of publishing a new ornithology of the United States of America, and having collected

and drawn a great many birds hitherto undescribed, he was very anxious for such an opportunity as the proposed expedition afforded, of adding to his stock of knowledge, and collecting fresh materials for his contemplated work.

Wilson had been previously introduced to Jefferson, for whom he felt a species of hero worship, which had been intensified by the receipt of a very cordial and appreciative letter from him in acknowledgment of the drawings of two birds which Wilson had secured on his trip to Niagara, and forwarded to the President after his return.

This letter would lead it to be inferred that Mr. Jefferson himself was a careful student of ornithology; and Wilson with his sanguine temperament must have built high hopes on the success of his application, but no attention was ever paid to it, and neither Wilson nor Bartram ever obtained a clue to the President's neglect, which surprised them greatly.

But he builds foolishly who builds on past courteous communications from kings or presidents. The probabilities are that the courteous and appreciative letter in acknowledgment of Wilson's drawings was written by a secretary or some one of the staff supposed to know something about natural history, and that Wilson's application revived no recollection whatever in the President's mind.

But an opportunity, perhaps still more favorable to Wilson's designs, was on its way to him. Mr. Samuel F. Bradford, bookseller in Philadelphia, was about to publish an improved edition of Rees' New Cyclopedia. Wilson was introduced to him as one qualified to superintend the work, and was engaged at a liberal salary as assistant editor.

The agreement is dated April 20, 1806, and two days later he wrote as follows to Mr. Bartram expressing diffidence in his ability for the superintendence of such varied subjects:

"This engagement will, I hope, in more ways than one, enable me to proceed with my intended ornithology, to which all my leisure moments will be devoted. In the mean time, I anticipate with diffidence the laborious and very responsible situation I am soon to be placed in, requiring a much more general fund of scientific knowledge, and stronger powers of mind than I am

possessed of; but all these objections have been overruled, and I am engaged."

This proved the stepping-stone to success in the great object of his life, which he soon unfolded to Mr. Bradford, who thought so favorably of the undertaking, and of Wilson's abilities, that he agreed to become the publisher, and furnish the requisite funds.

BIRD LEGENDS.

A MONG the various superstitions relating to the animal creation, our feathered friends play an important part, and it may not be uninteresting to retail some of the principal traditions and popular beliefs concerning them.

We will begin with the raven, who takes the place of the eagle in northern mythology. He was sacred to Wodan, and was believed to be his especial companion. Wodan had two ravens, named Huginn and Muninn, who reported to him all the news of the world; and, furthermore, announced to heroes their approaching death. Thence arises the universal belief that the croaking of a raven portends a death. In the Middle Ages, evil spirits were supposed to assume the form of ravens, for when Christianity transformed Wodan into the devil, his winged messenger became uncanny. Sometimes a sight of a raven brings illfortune, and sometimes it betokens good; but whoever finds a feather will have luck.

In Swabia, a flight of ravens foretells war, and in the Tyrolese Oetz-Thal, people say that, when ravens fly around some particular pasture, and suddenly dart to the ground, a cow will die within three days. The Tyrolese peasantry declare that the ravens are so clever that "they scent the powder in the gun," and that is the reason it is so difficult to shoot them. According to a Tyrol legend, the ravens and

crows once had snow-white plumage, and were beautiful birds, very proud of their appearance. They were especially fond of frequenting the neighborhood of streams, and bathed a great deal. One day they were thus engaged, when the Holy Child drew near to quench His burning thirst, but the ravens splashing in the water made it quite thick and muddy. Then the Holy Boy said: "Because ye are so ungrateful and so vain of your dazzling white plumage, ye shall henceforth have naught but black feathers unto the end of the world."

In the Lech Valley there is a belief that the ravens never drink during June, because in that month they feed the prophet Elijah. In North Germany, Swabia, and Tyrol, a superstition prevails, that if the eggs are taken from a raven's nest, boiled, and replaced, the old raven will bring a root or stone to the nest, which he fetches from the sea. This "raven stone" is very valuable, for it confers great good fortune on its owner, and has likewise the power of rendering him invisible when worn on the arm. The stone is found in the nests of magpies as well as ravens, and as it makes the nest itself invisible, it must be sought with the aid of a mirror.

In Pomerania and Rügen, the method is somewhat different. The parent birds must have attained the age of a hundred years, and the would-be possessor of the precious "stone" must climb up and kill one of the young ravens, who must be a cock bird, and not over six weeks old. Then the aggressor decends, taking careful note of the tree. The old raven immediately returns with the stone, which he puts in his son's beak, and, thereupon, both tree and nest become invisible. The man, however, feels for the tree, and on reaching the nest he carries off the stone in triumph. Rügen folks declare that this feat can only be accomplished by the help of the devil, and that the man's soul is the price paid for such assistance.

The Swabian peasantry maintain that the young ravens are nourished solely by the dew from heaven during the first nine days of their existence. As they are naked, and of a light color, the old birds do not believe they are their progeny, and consequently neglect to feed them; but they occasionally cast a glance at the nest, and when the young ones begin to show a little black down on their breasts by the tenth day, the parents bring them the first carrion.

The magpie shares the raven's reputation for sorcery in many places, and he is also supposed to bring bad luck. Silesia is the only exception, for there people think that the chattering of a magpie foretells the arrival of esteemed visitors. In Tyrol, on the contrary, its screaming denotes famine or pestilence. Whenever a magpie screams outside a house in West Prussia or Hesse, it is regarded as a sure token of strife within that same day. A magpie boiled down into soup makes him who eats it lose his senses.

In Lech Valley a curious notion exists, that when nine magpies are seen together, one of them is sure to be a witch. It is unlucky to shoot a magpie in Prussia; and in the Wetterau, the same theory is held respecting the water-wagtails, who are much given to frequenting the neighborhood of cows, "because they were formerly cows themselves!"

Popular tradition states that magpies were originally white birds, and that they owe their black feathers to some enchantment. But the time will come when they will cast off the spell and resume once more their snowy plumage, and then happy days will dawn on the earth. The Emperor Barbarossa sleeps within the mountain so long as the magpies wear their parti-colored plumage; but when they gain their former white hue, he will awake, and will emerge from his subterranean cavern, to reign triumphantly over a great united Fatherland. In Uhland's well-known ballad of the Emperor Barbarossa, it is the ravens who encircle the Kyffhäuser mountain where the Kaiser reposes.

Other ill-omened birds are the jackdaws, whose appearance in flights betokens either tempest or war; and the owl, whose hooting portends death; while in the Prussian Mark, Silesia, and Austria, the same quality is ascribed to the cock when he crows into the house. A crowing hen means ill-fortune, but it can be averted by immediately wringing the neck of the evil prophet. A white cock is a good omen. The Tyrolese peasanty say that, when a cock is seven years old, he lays an egg which produces a dragon.

Peacocks, when they make their disagreeable shrill noise, are said to predict rain, a piece of weather lore embodied in the following couplet:

When the peacock loudly bawls, Then we'll have both rain and squalls.

And in Lupton's "Notable Things," we read that the oftener they cry the more rain is signified. Again, the woodpecker's cry denotes wet, a notion which prevails on the Continent of Europe. It has on this account been properly called the "rain bird," and in Northumberland it is known as the "rain fowl." Several items of weather lore are associated with our domestic bird, the cock. Thus, according to an old proverb:

If the cock crows going to bed, He's sure to rise with a watery head. If the cock moults before the hen, We shall have the weather thick and thin. If the hen moults before the cock, We shall have weather hard as a block.

Once more, there is a common idea that if the cock stays on the roost longer in the morning than usual, and crows there, it is a sign of wet weather. Fowls again have their weather lore, and a well-known rhyme reminds us how,

If fowls roll in the sand Rain is at hand.

and a popular couplet in Scotland is to the following effect:

When ducks are driving through the burn, That night the weather takes a turn.

In Scotland there is a superstition that if the raven cries first in the morning, it will be a good day; if the rook the reverse. Thus the subjoined rhyme:

The corbie said unto the craw,
"John, fling your plaid awa."
The craw said unto the corbie,
"Johnnie, fling your plaid about ye."

Swans have generally been considered good weather prophets:

The swans that sail along the silvery flood, And dive with stretching necks to search their food, Then lave their backs with sprinkling dews in vain, And stem the stream to meet the promised rain.

The cuckoo, too, is not without its omens, as is shown by the subjoined piece of advice to the farmer:

When the cuckoo comes to the bare thorn, Sell your cow and buy your corn; But when she comes to the full bit, Sell your corn and buy your sheep.

The screaming of the owl is a bad sign, being supposed to prognosticate stormy, tempestuous weather. Lastly, when sparrows chirp a great deal, and robins do not venture to go far from houses, rain may be considered near at hand.

There is a legend common in Scandinavia that a dishonest handmaiden of the Blessed Virgin purloined her mistress's silver scissors, and that she was transformed into a lapwing for punishment, the forked tail of the bird being a brand of the theft, and that the bird was doomed to a continual confession of the crime by the plaintive cry, "Tyvit, tyvit!" that is, in Scandinavian, "I stole them! I stole them!"

QUEEN HONEY DEW.

NCE upon a time a little queen lay quietly in her cradle wondering when it would be time for her to slip out of her silken baby robes, and turn into a grown-up queen; for in Beedom, where she lived, the royal babies did not have to wait years and years to grow up, but as soon as they left the nursery they became full-grown almost instantly, and thus there was no time wasted, and they were ready at once to enter upon the duties of sovereignty.

This saved much expense in the way of tutors and governesses, lawyers and prime ministers, and seemed such a very wise plan altogether, that the inhabitants of that country often wondered why the rest of the world did not follow their example; but they were such an industrious race that they never had time to go abroad and spread their ideas, and could only hope that every one would grow wise enough some day to do just as they did, not only about queens, but about everything else.

And they really were such wonderful creatures that they were perhaps excusable in thinking their own ways almost perfect; for every great traveler has admitted that nowhere in the world exists a happier and more perfectly governed kingdom than Beedom.

The queen is so revered and beloved that it is not even necessary to provide her

with a body-guard; for whenever she appears among her subjects they one and all hasten to do her homage, and bestow such lavish attentions upon her that she enjoys a royal progress as long as she remains in view. She receives these attentions with the utmost graciousness, and permits herself to be caressed with such sweet dignity that it is easily seen that she holds her power as much by love as by birth, and that the offerings of honey and snow-drop farina, which are tendered her as soon as she appears, are given not from a desire to win her favor, but to show the affection of her subjects.

Such being the happy ways of Beedom, it is no wonder that the baby queens wish to leave their cradles as soon as possible, for among other wonderful gifts they are born with a complete knowledge of all the customs and habits of their kingdom, and are perfectly capable of governing as soon as they are out of the nursery.

Queen Honey Dew was no exception to the rule, and waited impatiently for the moment to come when she could leave babyhood forever. Her nurses were all waiting the moment too, with the tenderest anxiety, and, in fact, the whole country was excited over the matter, for the old queen had died some time before, and all the hopes and ambitions of the people were set upon the baby Honey Dew.

At last the time came. Honey Dew put off her silken baby clothes, left her cradle and stepped out a full-grown queen, and after a few drowsy seconds examined with interest the world outside her curtained nursery.

Nothing seemed strange to her, for, of course, she knew how everything would be; but, nevertheless, she found great pleasure in examining all the arrangements of her palace, and the dwellings of her subjects, and in the afternoon of the same day, it being warm and sunshiny, she set off on a royal progress through her dominions. Her

kingdom lay in the Land of Summer, and was beautiful with running brooks, singing birds, flowers, butterflies and trees, and Honey Dew went from object to object with ever increasing delight.

She had imagined how wonderful it would all be, but had never dreamed of anything so exquisite as the blue depths of the sky, the thousand tints of the flowers, and the sweet odors that filled all the air, and made it seem alive with beauty.

Everywhere she went she found her subjects busily at work, for in this they found their truest pleasure, and always looked with scorn upon any one who tried to shirk his share of the labor. And, indeed, so sure were they that happiness could only be found in work, that they could not have conceived of anything more miserable than to be deprived of their daily labor in the fields, and those of their number who persisted in idleness were generally put to death as a mark of their displeasure.

There were many other dwellers in the Land of Summer besides her own subjects, and Honey Dew often wondered to see so many of them idle or playing when she thought they ought to be at work, and she looked with surprise upon the birds who seemed to be so content to sit singing on the apple boughs rocked by the summer wind, and the butterflies who flew from flower to flower with apparently no thought for anything in the world but the moment's pleasure. Honey Dew was very indignant at such sights, and if the offenders had been her subjects would probably have condemned them to instant death.

As it was, the birds sang on, the butterflies flitted lazily through the air, and the dragon flies flashed in the sunlight, and Honey Dew never imagined that if it had been otherwise the Land of Summer would have lost some of its sweetest charms.

Once she paused as the ruby throat of a hummingbird gleamed through a spray of

grassy leaves, and wondered for a moment if it were not enough to be merely beautiful without always thinking of work, but she quickly dismissed this thought as unworthy the Queen of Beedom, and went on her way, sure that her own people were the wisest and most industrious on the face of the earth. And as the young queen grew older she became confirmed in this opinion, for she found that it took great caution and vigilance on the part of her subjects to keep their wealth secure from the bands of lazy marauders that were constantly on the alert to rob their thrifty neighbors. And she found that even Beedom was not free from jealousies and strife, for the inhabitants spend so much time in work that they grow a little impatient and uncertain in temper, and fly into the greatest rage, sometimes without waiting to see if there is any reason for it or not. Honey Dew grieved over the bad dispositions of some of her subjects, and went so far as to acknowledge to herself that perhaps a little play now and then among the flowers or by the side of a brook might sweeten their natures, and make them pleasanter to live with; but she did not dare speak of this, for she knew it was against the laws of the land, and that she was as powerless to change these as the humblest of her subiects.

But although Honey Dew worried over these troubles she could do nothing to help them, except to place the most vigilant guards around the castle to warn off daily and nightly enemies from abroad, and to try, by extra sweetness and amiability on her own part, to keep her subjects from domestic quarrels.

And it seemed after awhile that her efforts were crowned with success, for there was a long season of peace and happiness, and Honey Dew almost forgot that there was anything in the world but sunshine and flowers.

But one day one of the guards in front

of the palace noticed a stranger lurking around the entrance, and at once presented arms and asked what he wanted.

The stranger replied that he was the subject of a neighboring kingdom, also within the limits of Beedom, and that he was merely on a visit of curiosity, having heard such attractive accounts of Honey Dew and her people that he was desirous of seeing them himself.

The guard made no reply to this, and evidently thought that the traveler might better have stayed at home and gone about his work than wander around simply to gratify an idle curiosity, and the stranger, seeing that his politeness met with no response, very soon took his departure, and the guard hoped he had seen the last of him.

But he had not, for before long the stranger was back again, bringing with him a companion, and in spite of the protestations of the guard they persisted in lounging around the palace gates, and at last even tried to effect an entrance.

The guard promptly called a brother officer, and drove the intruders away; but now it was very evident that mischief was intended, and the officer of the guard was informed of the stranger's visit.

He at once put a double guard around the castle, and made preparations for instantly despatching the offenders in case of a return, but for a time it seemed that the caution was needless, for everything remained quiet, and the guards searched the horizon in vain for the appearance of an enemy.

But one beautiful day, when the sky was so unusually bright, and the flowers so unusually lovely that a large number of inhabitants had been tempted out in the fields, the watchman at the gate saw what seemed to him a large black cloud dimming the distant horizon, and sweeping rapidly toward the palace; he thought at first that there was a shower coming up,

but in a few moments he saw that the cloud was simply a multitude of foreign soldiers, and that they were sweeping toward the palace with the speed of the wind.

In a moment he had sounded the alarm, and the garrison rushed to their places, but before even these preparations were complete, the vanguard of the enemy was down upon them, surrounding the palace with shrill cries of defiance and threatening instant destruction to the besieged.

Honey Dew trembled as the hoarse trumpet of their leader fell upon her ear, for she well knew that her crown and kingdom, and even her life was at stake, and that even if her loyal subjects succeeded in repulsing the invaders it would be at a terrible sacrifice of life.

To add to her distress, a messenger rushed in saying that the besieging army was composed of the subjects of her own cousin, a rival queen, who had heretofore shown her nothing but friendliness, and knowing their warlike disposition she feared that the conflict could only end with the total destruction of one of the armies.

True to their usual mode of warfare, the besiegers tried at once to force an entrance into the royal apartments and murder the queen, knowing that by this means they would utterly dishearten their enemy, and after gaining an easy victory could plunder the palace at leisure.

But the Queen's guards drove them back again and again, and forced them to confine the conflict to the open air, for they well knew that if they once allowed them to gain an entrance it would be impossible to drive them out again since the small number left to guard the interior made anything like fair fighting an impossibility.

Angered by their inability to force the entrance, the besiegers rushed upon their foe with redoubled fury. The trumpets sounded loud and shrill and the robbers

massed themselves together to carry the place by assault.

But Honey Dew's brave subjects were not to be disheartened, and prepared to defend their queen and their wealth with their lives; their trumpeters roared back defiance to the enemy, and the veterans arranged themselves in solid phalanxes to meet the assault, while even the youths were pressed into service.

The gates were held by the royal guard, which consisted of the flower of the army, and here the enemy made the most determined onslaught, trusting in the skill of their bold leader, who had won for them many a bloody victory. Thrice they tried to force the guard, and thrice they were repulsed, and then giving over that portion of the castle for the time they turned their attention to the walls.

Here they were more successful. One party after another scaled the lofty battlements, and breach after breach was made in the wall, while the robbers cheered one another with shouts of victory, and reveled in the thought of the spoil.

But the Queen's brave defenders did not lose heart. The old soldiers still held their places unmoved, and encouraged the younger with words of cheer and wise advice. Those who had lost their weapons and could not fight were told to throw themselves upon the enemy, and hinder their progress by the weight of their bodies, and harrass them in every possible way.

At last admission to the palace was gained, and the battle waxed fiercer than before. In a few moments order and discipline were lost sight of, and there began a desperate hand to hand fight. No quarter was given or asked, and as the combatants surged to and fro in the halls of the palace it seemed impossible to guess whether the victory would be with friend or foe.

The enemy outside, encouraged by the successes of their comrades, now prepared for a final onslaught, and again the trum-

pets sounded for an attack, and as Honey Dew heard the harsh notes ring out above the noise of the battle her heart sank, for she knew that those inside had already all they could do to keep the enemy at bay, and that further exertion would be impossible.

But in the midst of the confusion a sudden lull in the tempest outside gave her a little courage. In another moment a messenger entered with the announcement that the absent subjects had returned from the The tide turned instantly; the robbers outside the palace had now all they could do to defend themselves from the fresh troops, while those inside, knowing that they could no longer look for reinforcements from without, ceased their mad struggle to reach the queen, and thought only of retreating. A few moments later the fate of the battle was decided; the enemy had been utterly routed, and retired in the utmost confusion, not even lingering to care for the wounded and dying.

The dead had nearly all disappeared before the battle ended, having been carried off by a regiment of giants who lived not far away, and whose custom it was to frequent such scenes of bloodshed, and secure the slain for their ghastly feasts.

Within the palace the scene was indescribable. The dead and dying lay in heaps along the corridors, and the piles of legs and heads scattered everywhere around showed how deadly the carnage had been. Not an enemy remained alive in the palace an hour after the battle, for the wounded had been speedily dispatched, and not one who entered succeeded in escaping.

After the strife was over the palace was quickly cleared of all signs of the conflict, the dead bodies being carried off to a distance from the royal domain where they were decently buried.

The victors then returned to the palace, and all set about repairing the damage that had been inflicted. The shattered walls and battlements were repaired, the gates strengthened by additional masonry, and the defaced corridors restored to their original order.

When all was finished the officers of the realm waited upon Honey Dew and tendered their congratulations upon the success of her troops, and she in return delivered a long oration in which she bestowed great praise upon the generals and soldiers who had fought so bravely in her defense.

And then, being of such a practical turn that they could not bear to have their usual work longer interrupted, most of the survivors returned to the fields, and spent the remaining two hours of daylight in making up for lost time.

And when the shades of evening gathered around the castle, the groups of veterans drawn together at the gates, discussing the exciting day, were the only signs of the late battle.

The veterans shook their heads and talked over the event in loud tones, praising the young troops for their fortitude, and the older ones for their discipline, and all agreeing that it was they themselves that had decided the victory. And no one contradicted this, for no one was there to do it, and the veterans chuckled joyfully over their great deeds without one dissenting voice.

But Honey Dew did not get over the terrors of that day for a long time, for it had given a great shock to her trusting disposition to find such treachery among her relations. However, as time passed on, and she grew more accustomed to the vicissitudes of life, she was able to take a little pride in the event which was long celebrated in the annals of Beedom, and it was said that if she had any favorites at court they were sure to be found among the number that had fought so bravely for her in the first year of her reign.

But although this toleration for war became possible, it was well known among all

the neighboring tribes that Honey Dew loved peace above all things; and through her influence her kingdom became renowned for its wisdom and wealth, her treasure houses containing such riches as were never dreamed of by neighboring sovereigns.

And so she lived and reigned through many happy years, the greatest and most beloved queen in all the Land of Summer.

HENRIETTA CHRISTIAN WRIGHT.

SINGULAR BIRDS.

THE true cuckoos are celebrated for eggs in the nests of insectivorous as well as granivorous birds, and what is not less extraordinary, the foster parents, often of species much inferior in size, bestow as much care on the young cuckoo as upon their own proper nestlings, although the deposition of the strange egg is generally succeeded by the destruction of whatever others may have been in the nest. If other eggs be subsequently laid, and hatched with the young cuckoo, the latter ejects its helpless companions by insinuating itself under them, and then by a jerk casting them successively over the rim of the nest. This it does when about eight days old.

The cause of this unusual phenomenon is vet unknown, but appears to be immediately connected with the structure of the reproductive organs, and to be necessitated by the fact that the female cuckoo lays only at intervals of several days, and laying five or six eggs could not well incubate her own. Certain it is, that although a great proportion of the young cuckoos are not hatched till after their parents have migrated southward, the female has been often seen to loiter about in the vicinity of her offspring, which she has been known to entice away when it took flight. Herissant attributed the phenomenon to the position of the gizzard, which in fact is placed further backward in the abdomen, and is less protected by the sternum, than that of birds in general, as is also the case with the moth-hunters, which the cuckoos closely resemble in their internal structure. Their young are very slow in learning to take their own food, and are fed by their foster parents till their feathers have nearly attained their full growth.

Africa, and the islands of the Indian Ocean, produce several small species of cuckoo, the plumage of which is more or less gilded, brilliant emerald-green, bronzed, or purple. A crested, spotted species is occasionally found in southern Europe, the cry of which is very sonorous.

The colies are birds of Africa and India, which climb somewhat in the manner of parrots, live in troops, and even breed in society, constructing numerous nests in the same bushes. They sleep suspended on a branch with the head downward, many of them together, and subsist on fruits, buds of trees, and tender sprouts of vegetables.

These very curious birds are closely allied by affinity to the plantain-eaters and tour-They sail from bush to bush in a long row one after another, alighting always near the ground, and clambering to the topmost twigs with the assistance of the beak and long stiff tail, picking off the buds or berries, and do not pass to the next until the whole flock are ready, when they again sail in the same regular succession. They are very mischievous in gardens in the Cape Colony, devouring the young plants of vegetables as fast as they spring up, and are there known by the term huysvogel, or house-bird. Their cry is monotonous (having but one pair of vocal muscles). and in the largest species closely resembles the bleating of a lamb. G. B. G.

ARKANSAS BIRD NOTES.

BY A LOCAL SECRETARY.

A T the first announcement by the newspapers of the new crusade against the destroyers of birds and the wearers of their dead bodies, our little family, white and colored, resolved unanimously, "No bird or wing of one shall ever disfigure hat or bonnet for us."

For years we have waged war with the small boy and his sling-shot, and have saved many a little warbler by a timely interference. We scolded, threatened and entreated; but how much better were we? He killed. We remonstrated, yet wore the fruits of his thoughtlessness in our bonnets. All in all, did not the boy have the better excuse?

We are more pleased than we can express at the appearance of the Audubon Magazine, and hope for it success commensurate with the importance of its undertaking.

There is a broad field here for earnest and industrious labor. Your northern redbreasts, meadowlarks and kindred birds of passage have a dangerous gauntlet to run in going to and from their winter resorts. Great strings of robins and larks are offered for sale on our streets as articles of food every autumn and spring. Nor are the birds who summer with us exempt. The mockingbird, prince of our song birds, becomes a source of revenue. Relentlessly and industriously is his nest plundered, his little ones taken captive to be reared for a foreign market. Will Madame, who "so wishes to have a mockingbird," remember that to gratify her wish at least four nests must be taken? These birds it should be understood do not breed in captivity. They must be taken when young from their nest and wild mother, and at least half of those taken are not singers; of the remainder scarcely a tenth survives the unnatural conditions. This, then, my lady friend, is the price of your beautiful singer.

We already begin to note with concern that mockingbirds are becoming scarce, and are told by some that the advent of the English sparrow is driving them away, where? If the Audubon Society can prevent the traffic in these birds they will return in spite of the sparrow, who, poor little ragged, persistent chatterer that he is, finds himself the scapegoat for many a worse marauder. He is said to drive other birds away, and do no end of other misdeeds, besides making of himself a nuisance generally. Let me ask my Southern friends why it is that since his appearance in force we have escaped the annual plague of the caterpillar. Has he "driven" them away also? If so, welcome little nuisance.

I have been in the habit of noting down a few little items to me interesting in spring, but up to the last month have given but a line or so to them in my housebook amid bills of butcher and baker. Since reading an article in the April *Chautauquan*, by our friend John Burroughs, I have been led to try something more extended, and am already more than repaid for outlay in time by my note on the oriole.

I quote from them, hoping they may not be uninteresting to the readers of the AUDUBON:

First week in February, 1886.—"The robins are here in great numbers, and how disappointed they must be, it is so cold. There are numbers of the cardinal redbird also, and a little gray-breasted, brownbacked and brown-winged fellow that we call a sparrow, not knowing his real name. I have scattered millet, oatmeal and cracker crumbs for them, but so far as I can see all of them prefer the little hard cedar berry."

March 15.-" The martins are here."

March 17.—"The little house built for the martins was scarcely in position ere it was occupied; not without investigation, however, on the part of Mr. and Mrs. Martin."

April 12.—"Strawberries in full bloom, and we have heard frogs."

April 18.—"The long, clear notes of the oriole."

May 3.—"Picked strawberries three weeks from full bloom, and just one year from date of last year's first picking."

May 6.—" Had peas from our garden."

May 27.—"Used potatoes, not quite ripe."

February, 1887.—"The robins and bluebirds are here the very first of the month, but I am sure there are not as many as last year. Do they remember the treatment they received last year and before?"

February 7.—" Heard frogs last night." March 2.—" The martins are here."

March 4.—"We were awakened this morning by loud chatterings and calls, and cries from martin and sparrow, and were amused spectators of a short, yet spirited conflict between them. The little house built for and occupied by the martins had been appropriated by the little sparrows during the winter, and now came the martins to claim previous occupancy. It is needless to tell that the martins came off victorious, yet so it is, but the eviction was not accomplished without much goings off for reinforcements on both sides. Now the martin sits on his roof gurgling out defiance to all the sparrow tribe."

April 14.—"The oriole is here four days earlier than last year."

April 15.—"Amid the chatter of the martins, the fiddling of the blackbirds, whose coming I failed to note, we heard a new song. After some search our patience was rewarded by a sight of the singer, who proved to be our friend the oriole with a new note."

April 16.—"The redbird seems to be here after all, for I heard him to day in a sort of duet with the oriole."

April 18.—"I am surprised indeed, for the redbird, which I was sure I heard, proves to be the oriole again. I have watched him so closely that I am sure there can be no mistake. It seems strange there is not more said of his varied gifts as a singer. He has his own peculiar trill or rolling song; the robins call, and now the redbirds whistle."

April 23.-" The new magazine called the Audubon, published in the interest of the Protective Association, whose April number we saw at the printing office, and at once sent for, has arrived, and we are much pleased with it, particularly so with the February number containing a nice article on the oriole. The writer says that Nuttall speaks of an oriole 'which imitated the whistle of the cardinal redbird. the call of the Wilson's thrush, and the song of the robin.' Just what I had noted, and I am delighted to be able to corroborate so fully the testimony of so well known an observer, and perhaps spread the news of a fact not yet well established."

April 26.—"I thought I heard our little yellowbird to-day. Must listen for him."

April 27.—"Heard a new singer in the already full orchestra. From a pretty fair look at the little warbler I think he may be the fallowfinch or wheatear from the description we have of that bird."

May r.—"Have just noticed the presence of the woodpecker, though I suppose he has been here all the time, but as we had no peas or plums as yet he had no business with us, and we no interest for him,"

May 2.—"Magnolias in full bloom, roses and honeysuckle past their first prime. Peas for dinner."

Perhaps this is enough to suggest a line of action to the most casual observer who may read these simple notes. L. M. S.

THIS is a term popularly employed to include many of those birds which frequent the sea coast at certain seasons of the year. They are for the most part members of the family Limicolæ, of which plovers and sandpipers may be accepted as general types.

Familiar as they are to residents along the Atlantic seaboard, they are in no sense of the word exclusively marine. They are simply migratory birds, which, following the line of coast in their migrations, have learned that a living is to be picked up upon the sands and rocks that bound the ocean, and that the salt marshes supply a rich and varied bill of fare. A considerable proportion, but by no means the whole, of the birds of this order take the coast route in their passage north and south, and constitute a familiar feature of the landscape at certain seasons; some of these build their nests and rear their young along the Atlantic seaboard, being either non-migratory or confining their migrations within the limits of the United States.

But as regards those birds of the order whose range of migration extends from the tropics to the Arctic region, a great many of them make the passage inland, the valley of the Mississippi being a well defined route, and perhaps the one inland route capable of affording a continuous and adequate supply of food for large numbers.

The salt marshes and sands of the seashore, moreover, not only furnish an abundant food supply, but food of a class entirely different from what the birds have been living on either north or south, and there is no room for reasonable doubt that these birds look forward to spending a few weeks or months at the seaside with pleasurable anticipations akin to our own, and enjoy the change of diet with the same keen zest.

Birds are compelled to migrate both by the influence of climate on their own constitution and its effect upon their food supply, and while some of our familiar shore birds winter far down in South America, where it is then summer, and spend the summer well within the Arctic circle, there are others, like the purple sandpiper, who winter upon the bleak New England coast, and start for the north as soon as the icy grip of winter has been relaxed, but only to make room for the visitors from the south, among others the well-known piping plover and the ringneck, whose notes herald the approach of spring. The piping plover has come to stay, and soon makes himself at home, but abundant as is his food supply it consists of sand fleas and other small insects, and the energy with which he pursues it shows that all his faculties are called into continuous activity for the maintenance of his existence.

By the middle of April, or from that to the close of the month, the winter yellowleg puts in his appearance on the New England coasts, and does his best to maintain his established reputation as a voracious feeder. Their usual feeding ground is the low marshes, where they find innumerable small minnows and other forms of marine life left by the subsidence of the tide.

These birds are stigmatized by gunners as "tell-tales," for the "yellowshank" is not only extremely vigilant, but on the first approach of danger he gives vent to a loud, shrill whistle, which serves as a warning to all the birds in the neighborhood.

Another early visitant is the winter snipe or red-backed sandpiper, who goes no further south than Virginia, where he puts off his black summer waistcoat, and is hardly recognizable as the same bird. These birds are not so numerous on our shores in spring as they are in the fall, a circumstance due apparently to the fact that a great many of them migrate northward by an inland course over the Great Lakes, on whose shores they are plentiful in early summer.

Early in May the least sandpipers or sandpeeps are with us, graceful, musical, restless little creatures, devoting themselves unceasingly to the great business of life, following the tide out with its ebb, and retreating before it when it flows. There are two or three varieties of these, and along with them is found the sanderling, feeding like them along the edges of tide water.

By May 20 the red-breasted sandpiper puts in his appearance, and announces himself with his dual whistling note, but he does not come to stay; he has taken his ticket for the great, lone northern land, and simply stops for food and rest, but flock succeeds flock until by the first week of June they have all disappeared.

These birds scratch like a hen in pursuit of horseshoe eggs. Turnstones, too, join with them in the pursuit, and when a find is made there is frequently some free fighting over its appropriation. They are abundant all the way from the Great Lakes to Cape Breton, and are supposed to breed very far north. They are back again in August, the adult males reaching us the last week in July, but young birds do not make their appearance until later, and it is not until the first week in October that they have all come and gone.

Another familiar visitor is the black-breasted plover, which reaches the New England seaboard about the middle of May. This is the largest of the plovers, and has been hunted until it is almost exterminated. Besides these there are willets, curlew and snipe of several species, some of which are with us all summer, not only on the coast, but wherever there are suitable feeding grounds throughout the whole country.

The birds of this family, in common with ducks and geese, have a very wide migratory range, penetrating into the desolate stillness of the marsh and lake region of the Arctic North, where the short summer stimulates a most prolific insect and vegetable life.

All the Arctic navigators report birds more or less abundant in high latitudes. Red phalaropes, ring plover, golden plover, ptarmigan, sanderlings, snow buntings, sandpipers and snipe are common above seventy degrees north latitude; here they build their nests and rear their young in the solitudes of the northern extremity of Hudson's Bay, as do also ducks, geese, brant and innumerable other water fow!

But the summer season in the great lone land is a very short one. Life starts into activity with a bound, and is arrested with equal suddenness; but emerging from the Arctic circle the shores of Labrador enjoy a summer almost tropical, in which its short-lived vegetation is forced with energy. There are hundreds of miles of low land along these coasts stocked with heathery, berry-bearing shrubs, which afford a favorite food for birds migrating southward at the close of summer. The principal berry is a deep purple color—almost black—not unlike our blue berries, and described as bear berries or curlew berries.

Dr. Coues, writing of a noticeable effect of feeding on these berries, observes that after emerging from these regions the birds have the "whole intestines, the vent, the legs, the bill, the throat and even the plumage more or less stained with the deep purple juice." These marks are not even obliterated at the time of their return southward to Cape Cod.

Fishermen and shipmasters who have visited the coasts of Labrador describe the birds as stringing down from the mountains to the feeding grounds in myriads, but the food supply is practically inex-

haustible. The native fishermen kill and salt them in barrels.

On the return journey in the fall of the year many of the Limicolæ strike out on a due southerly course from Nova Scotia, reaching the West India Islands, and as they never winter there, it is assumed that they cross the tropics, and finding the seasons reversed, winter in the warm region of tropical South America, passing southward as spring advances, reaching Patagonia in December or January. There is abundant evidence that precisely the same birds are common to South America, and many of the observed facts point to the conclusion that a great number of our shore birds make the American grand tour annually, securing for themselves a tolerably equable climate throughout the year.

It is observed that they never cross Barbadoes on their return journey in spring, and this fact is attributed to the prevalence of the trade winds which drive them toward the Mexican highlands, and it is perhaps due to the prevalence of these winds at this season that only the most powerful winged of the shore birds beat their way up the Atlantic seaboard, the birds of heavier flight prefering the course of the Mississippi.

What a restless, wandering life! extending annually over a hundred and twenty degrees of latitude, or seven thousand miles, exposed at every stage to dangers, not the least of which is that of being carried so far out to sea by storms that there is no hope of return. In such cases the struggle for life must be a desperate one, for instances have occurred of American birds reaching the coast of Europe.

East India abounds with birds of this family, as well as with ducks, geese and waders of every kind. They are only winter visitors, reaching northern India in October and remaining until February, and there is no record of their going thence southward to the tropics, but on their re-

turn northward to Siberia they spread out in the same latitudes as our own, and it is at least very possible that birds of both hemispheres are brought into immediate contact during the nesting season. When we consider, too, that the old birds start first on their southward tour, leaving the young to follow, it might be expected that the young of one hemisphere would sometimes accompany flights of kindred birds southward over the other hemisphere; but until the distinguishing marks of nearly allied species shall have been carefully studied, and the knowledge rendered popular it will be very difficult to collect evidence on this point.

The following are the principal birds frequenting our eastern coasts, which are included by gunners in the one general term, "bay snipe:"

Long-billed curlew—popularly known as sickle-bill or sabre-bill.

Hudsonian curlew—the jack, or short-billed curlew.

Esquimaux curlew—the fute, doe-bird or little curlew, as he is termed locally.

Black-bellied plover—the blackbreast, bullhead, beetlehead, bottlehead, oxeye, pilot, are among the numerous aliases conferred on this bird in various localities.

Golden plover—the golden back, green-back, frostbird, whistling plover.

The marble godwit—humility or marlin. Hudsonian godwit or ring-tailed marlin. Semipalmated snipe or marbled willet.

Tell-tale tattler, or great yellowshanks. Little tell-tale or common yellowshanks.

The red-breasted snipe known as quailsnipe and dowitch.

The turnstone—calico back or brant bird. Red-breasted sandpiper or robin snipe.

The pectoral—The red-backed and long-legged sandpipers.

These birds have all numerous aliases, and to identify any of them by local names it is necessary to consult Gurdon Trumbull's new work "Bird Names and Portraits."

THE AUDUBON NOTE BOOK.

MEMBERSHIP RETURNS.

The registered membership of the Society on Aug. I was 47,415, showing an increase of 319 for the month, due to the following sources:

New York	50	Minnesota	19
Massachusetts	29	Dakota	1
New Jersey	16	Nebraska	2
New Hampshire	2	Missouri	9
Connecticut	90	Texas	16
Vermont	2	Tennessee	2
Rhode Island	3	California	2
Pennsylvania	7	North Carolina	4
Indiana	2	Georgia	10
Michigan	15	Virginia	17
Illinois	12	Ontario	4
Ohio	2	England	2
Iowa	I		
			310

C. F. AMERY, General Secretary.

BIRD LANGUAGE.

THE indigo bird I mentioned in my last letter was in the woods near our house. He was so high in the tree that at first I could not tell whether he was red, blue or green, so I sat down and waited for him to show himself. For a while he pecked about among the leaves, uttering all the time an important little Chip! Chip! I thought I would follow Miss Merriam's example and imitate him. He stopped his work instantly and came down a little. I "chipped" again, and he came down still further. Then he changed his note and cried Chee in the most endearing tone. I took the hint and "chee-ed" also, whereupon he became violently excited. He flew from the tree to a bramble bush, and from there to a tuft of grass, "cheeing" and fluttering his beautiful blue wings. Then he flew around and around me in circles so close that two or three times he almost brushed my shoulder. I never had a wild bird so close to me before, and I could have caught him had I tried. When I came away he followed me all the way to the meadow. Can you explain his strange conduct? There was no nest in the vicinity.

Yours very truly, ETHELDRED B. BARRY.

Note by Editor.—Olive Thorne Miller, in "Nesting Time," writes of "calming anxious parent birds by addressing them in their own language," while admitting that she does not know the import of the sounds she utters, and Miss Barry's little adventure with the indigo bird lends confirmation to the view that it is possible to acquire a greater or less command of bird language. Birds have probably utterances capable of giving expression to every emotion which they experience, and it requires a person of

delicate ear and good vocal organs to reproduce any of these sounds with such measure of fidelity as the parrot attains to in the utterance of words. But so much achieved, the presumption is that certain favored people may surpass the parrots, and by careful observation be able to determine the sentiments conveyed by the sounds they employ, and actually engage in conversation with birds. Miss Barry is one of the most earnest workers of the Audubon Society, and now that her attention has been directed to the study of bird language, we may hope that even if she do not acquire "Charley's" facility of discourse, she will, nevertheless, acquire a good, practical knowledge, and afford us an opportunity some day of publishing her translations of avian dialogues.

CLEVER BIRDS.

ONE morning when my little sister was walking with mamma, she found a lettuce bird in the path. It had evidently fallen from the nest, but they could not see where it was, and fearing the bird would be killed if it were left in the road, mamma told Bessie she might bring it home, and, as it was a seed-eating bird, they hoped to be able to raise it in the cage with the canary bird.

She carried the little thing home and put it in the canary's cage, which hung in the shady front porch. In a little while we heard a commotion among the birds, and hurrying into the porch we saw a pretty sight. Two full grown lettuce birds, evidently the parents of the one in the cage, were fluttering about the bars with some food for their baby. He was standing on the perch, and seemed afraid to try to fly down; so the canary flew down, took the seeds from the old birds, and carried them to the little one. They did this several times.

The next day Bessie met a small boy who had another yellow bird, about the size of the one she had found the day before, apparently one of the same brood. She bought it from him for five cents, and carried the frightened birdling tenderly home and put it with the caged birds. After that for two days the parent birds came at daylight and flew in and out until dark, feeding the two young ones.

On the third day the male bird came alone, and we feared the little mother had been killed. After about a week, however, she came again, bringing with her a third bird about the size of our two pets. It seemed clear that, after trying to care for the divided family together, the intelligent birds had agreed that the father should take care of the caged

birds, while the mother tended the lonely birdling in the nest until it was able to fly, when she brought it to visit its brother and sister. They were all by this time old enough to fly, so, although we grieved to part from our little friends, we determined to reward the wise and loving parents by giving their children the freedom all birds love so well. We opened the cage door, and after a few timid twitters and flutters, the young birds flew out, and the re-united family flew away in the sweet summer air. As for the canary, virtue had to be its own reward, but it seemed to satisfy him, for he followed his departing guests with a beautiful burst of song.—II. II. Daingerfield in the Swiss Cross.

PREDATORY BIRDS.

EVERY disciple of Audubon knows how much the birds about country houses are usually frightened by the discharge of a gun, but probably there are a good many of those disciples who never saw a bird show real pleasure when a gun was fired. The nests of three robins can be found within five rods of my house, besides a number of nests of swallows, bluebirds, ground birds, etc., and I have in consequence been very careful about doing anything that would tend to frighten the old birds. That they appreciate kindly attentions has been amply demonstrated by their freedom in approaching not only members of my own family, but neighbors and strangers also who have called on us.

But the other day a crow blackbird came into a maple where one of my robins had a nest, determined, I suppose, to destroy the eggs. The black rascal had been there before, but he had been driven away by the robins every time. This time he avoided attack by hopping from limb to limb instead of leaving the tree. The robins were in great distress. They flew hither and thither, screaming with anxiety and anger, and dashed at the enemy with a courage and vigor that ought to have whipped him quickly but did not. Seeing that the nest of a song bird was in danger, my boy, a lad of eleven, ran for his rifle, and by a lucky shot brought the blackbird to the ground. The projectile cut across the backbone of the bird and "tumbled," making a terrible screaming noise as it flew off over the field beyond.

Did the robins fly away in alarm at all that noise? Not at all. On the contrary. The mother bird went at once to the nest, while the male began such a cheerful song that it would have been a dull ear indeed that did not hear words of thanks in it.

Was it wrong to kill the blackbird? I do not think so. Every one knows that there is a deadly war between different sorts of birds, although one may scarcely call it a war when the aggression is all on one side. On the one side we find crows, crow

blackbirds, bluejays, owls and hawks; on the other side song birds. I do not care for the purpose of this argument, whether the predatory birds do the farmers any good by killing vermin or not. I do know the song birds are destroyed, both while in the egg and afterward, by the predatory birds. Suppose a crow does eat insect eggs on the meadow, would not the song birds which one crow destroys in a season do the farmer much more good? Surely to remain neutral is to encourage the destruction of song birds.

I do not wish to advocate the indiscriminate slaughter of any sort of predatory birds, but having read so many appeals for the lives of predatory birds I cannot help urging bird lovers to exercise their chivalrous instincts if not their common sense, and occasionally take the side of the weak against the strong.

John R. Spears.

Note by Editor.—Every effort on man's part to defend the weak against the strong is an interference with the conditions by which the existing balance of life is maintained, and may possibly have results widely different from what were anticipated. Nature is regardless of the individual but careful of the species, and as regards singing birds which tend to multiply rapidly, the checks imposed on that tendency by predatory birds is necessary to save them from constantly increasing beyond the limits of their food supply, a condition of things which would entail far more suffering, and render life far less tolerable and happy for them than it is under existing conditions. Predatory birds enjoy life themselves, and contribute to the sum of its enjoyment by those on which they prey. At the same time these general considerations need not always influence our conduct in individual cases. The existing balance of life is being constantly modified by the progress of settlement, which favors some families at the expense of others, and it is only when organized and systematic efforts are taken for the eradication of particular species or genera of birds that we may anticipate grave evils from the disturbance of the machinery by which the balance of life is readjusted to new conditions.

Song of the Prairie Lark.—In a recent number of the American Magazine appears an interestin article under the above title from the pen of Mr. Ernest E. Thompson. The western meadowlark has hitherto had scant justice done to his powers of song, but Mr. Thompson not only fully describes this liquid melody but has written it out in musical notation so that any one may reproduce it on an instrument. The article is illustrated by two figures from Mr. Thompson's pencil.

EMINENT PEOPLE ON BIRD PROTECTION.

OAK KNOLL, Danvers, Mass., and mo., 20, 1886.

Editor Forest and Stream:

I heartily approve of the proposed Audubon Society. We are in a way to destroy both our forests and our birds. A society for the preservation of the latter has long been needed, and I hope it is not too late for the accomplishment of its objects.

I could almost wish that the shooters of the birds, the taxidermists who prepare their skins, and the fashionable wearers of their feathers might share the penalty which was visited upon the Ancient Mariner who shot the Albatross. Thy friend,

JOHN G. WHITTIER.

BROOKLYN, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I am heartily in sympathy with your purposes for the protection of birds, and should be glad to contribute any influence that I can to that end.

If there were no purchasers there would be no demand, and no reason for slaughtering these winged gems. But as only women create a demand, it rests upon them to stay this wanton destruction. I am sure that it is only necessary to bring before American women the cruelty of this "slaughter of the innocents" that fashion is carrying on, to secure a renunciation of this ornament and the salvation of birds.

On this subject the kind feelings, the taste, and æsthetic sympathy of the whole community are on your side, and if you persevere you will surely win.

HENRY WARD BEECHER.

CORNWALL-ON-HUDSON, N. Y., Feb. 22, 1886.

Editor Forest and Stream:

You have indeed my hearty sympathy in every effort to prevent the slaughter of my innocent little neighbors and friends, the birds. In the destruction of forests and birds, the people of this land are inviting very great evils and inflicting wrongs on posterity which scarcely can be measured. The press should render it impossibe for women to sin thoughtlessly and ignorantly in demanding little birds for their adornment. The evil should be brought home so fully to the knowledge of all, that the continued wearing of our useful little birds should become the badge and indication of a callous, vulgar nature. You are doing a humane and patriotic work in exciting public aversion to one of the most cruel and stupid wrongs of the age.

Respectfully yours,

EDWARD P. ROE.

West Park, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I scarcely need assure you that your undertaking to form a society for the protection of our wild birds against the ravages of the milliners and the sham scientific collectors has my warmest sympathy and approval. It is a barbarous taste which prompts our women and girls to appear upon the street with their head gear adorned with the scalps of our songsters; and it is mere vanity and affectation which prompts so many persons to make up cabinets of the nests and eggs of the same. The destruction of our birds from their natural enemies is immense, and this craze of the collectors, and folly of the milliners and their customers in addition, threatens their serious diminution.

I hope you may succeed in creating so strong a public sentiment upon the subject that the collectors of skins and eggs for the unworthy purposes of fashion or to indulge the vanity of pseudo-naturalists may suddenly find their occupation gone.

Please add my name to the list of the members of the AUDUBON SOCIETY. Very sincerely,

John Burroughs.

160 W. 59TH STREET,) NEW YORK, Feb. 20, 1886.)

Editor Forest and Stream:

No one who will take the trouble to give the matter a few moments' serious consideration can be in doubt, I think, as to the wisdom of organizing the AUDUBON SOCIETY, and I am thankful that such a step is contemplated. There is an element of savagery in the use of birds for personal decoration, which is in grotesque contrast with our boasts of civilization. But even the savage stops short, as a rule, with the feathers. It is only Christian people who think it worth while to butcher a whole bird to adorn their head gear. I am sure, however, that this is largely from that unreflecting habit which is a leading vice in people who follow the fashions. But it is a vice; as Hood sang, when he wrote—

For evil is wrought
By want of thought
As well as by want of heart.

If the AUDUBON SOCIETY can teach men, and especially women, to think on this subject, half of the battle will have been won. HENRY C. POTTER.

Andover, Mass., Feb. 21, 1886.

Editor Forest and Stream:

I am in earnest and indignant sympathy with the motive of any society organized to prevent the murder of birds for decorative purposes.

E. S. PHELPS.





THE FORK-TAILED FLYCATCHER.

(Milvulus tyrannus (Linn,))

THE AUDUBON MAGAZINE.

VOL. II.

OCTOBER, 1888.

No. 9.

THE FORK-TAILED FLYCATCHER.

You will readily see if you glance at the plate on the opposite page whence this bird derives its name. It is by no means a familiar bird, and probably few of our readers, except those who live in the extreme Southwest, have ever seen one. There, however, they are abundant enough, and have much the same habits as our well-known kingbird. It is really a bird of the tropics, and is found in Mexico, but only accidentally north of that Republic, although Audubon reports having observed it in Louisiana and Kentucky, and both he and Bonaparte speak of specimens taken in New Jersey.

The Fork-tailed Flycatcher belongs to the family Tyrannidæ, a large group of birds found only in America, and most abundant near the equator. The name is taken from the Greek word $\tau v' \rho \alpha v v o s$, which means a ruler or sovereign. It is the same word that gives us our English word tyrant, but the original has no bad sense, while tyrant, as we use it, always conveys the idea of oppression. If we remember the habits of our own little kingbird, which is also one of the Tyrannida, we can see how applicable the family name is to some members of this group. There are over four hundred current species, of which, probably, two-thirds are valid, the others being either slight varieties or else mere synonyms.

The Tyrant Flycatchers of the United States have ten primaries or quill feathers on the outer joint of the wing. The tail consists of twelve feathers usually nearly even, but sometimes, as in the case in the present species, deeply forked. The feet are small and weak, only fitted for perching. The bill is broad, much flattened at the base and turned down at its tip, and there is usually a notch just behind this hook. The nostrils are small, circular in shape and placed at the base of the bill, and are overhung by bristles. The mouth is large, opening back nearly or quite to the eyes, and bordered by long hairs or bristles. The bill is extensively hollow, and very light and resonant, and when snapped makes quite a loud, clicking noise. As has been often remarked, this large, light bill and capacious mouth bordered by bristles is admirably adapted for the capture of flying insects. Besides the Tyrant Flycatchers are swift of wing, and active enough in pursuit to follow each twist and turn of the insects that are seeking to escape them. They may be readily recognized by their flight, and above all by their habit of perching to await the approach of their prev, and then darting out, seizing it and returning to the same perch again. The snapping of the bill can often be heard while they are doing this.

As the Flycatchers are dependent altogether upon insect food they are in these latitudes always migratory, disappearing early in the autumn and returning with the first warm weather of spring. The Pewee, so common about every farmhouse, is the first of the Flycatchers to make its appearance, often reaching Connecticut by the middle of March, when the snow is on the ground. They have no powers of song, their calls being for the most part limited to a harsh scream or twitter, yet one species has a very soft and plaintive note.

The sexes are usually alike in color, though in one species found along our southwestern border, the male is brilliantly colored while the female is quite dull.

Although the Tyrant Flycatchers are as a rule plain and sober in the colors of their plumage, there are some exceptions to this rule, among which may be noted the socalled "bird of paradise" of Texas, a bird which in shape and size resembles the Forktailed Flycatcher, but which is much more beautiful in color. It has the same long, forked tail, which is sometimes ten inches long, and is hoary gray above and pure white beneath, while the flanks are washed with delicate salmon pink, which extends to the lower tail coverts and the tail feathers themselves. The crown patch and the feathers at the insertion of the wings are bright scarlet. This brilliant bird is common in Texas and to the southward in Mexico and in Central America.

So much may be said by way of introduction to a very interesting group of birds of which some examples must be familiar to every one of us, for to it belongs the kingbird, famed for his courage, the phœbe, builder of mud nests in caves, under rock ledge and in barns, and the smaller Flycatchers, who dwell more in the woods, and so are less well known to those who do not

make a study of our birds. Miss Florence A. Merriam, in her series of charming sketches, entitled "Fifty Common Birds and How to Know Them," published in earlier numbers of this magazine, has brought out many of the characteristic habits of the *Tyrannidæ*.

The Fork-tailed Flycatcher reminds us in many of its habits of our own well-known kingbird. Like it, and, indeed, like all members of this group, it is very courageous, and does not hesitate to attack birds of prey which may venture to approach its nest. In its flight when in pursuit of insects it uses its long tail as a rudder to aid it in making quick turns, and like other Flycatchers it frequently vibrates the tail when it alights.

Although its food consists chiefly of insects, it does not altogether disdain fruits and berries, but like the kingbird seems to enjoy a varied fare. The stomach of the specimen secured by Bonaparte in New Jersey was found to be full of pone berries.

The actual bulk of the Fork-Tailed Flycatcher is only about that of the kingbird, but the great length of its tail feathers make its measurements very different. It is fourteen and a quarter inches long, and has a spread of wings of fourteen inches. The outer tail feathers are sometimes ten inches long, while the middle ones measure but two and a half. The head and cheeks are black, the feathers of the crown being yellow at the base, but this patch is concealed, except when the crest is erected. The back is ashy gray, becoming darker toward the rump. The wings are blackish brown, the feathers being margined with gray, and the tail is of the same color, except the outer web of the long feather on each side, which for half its length from the body is white. The under parts are white, the bill and feet black, and the eye brown. The male and female are alike in plumage.

WILSON having found a publisher for his long contemplated work, threw all his energies into the enterprise, devoting to it every moment that he could spare from his duties as editor of the Cyclopedia; and his friend Lawson, who had previously thrown so much cold water on the enterprise, saw the matter in quite a different light now that Mr. Bradford had assumed the risks and employed him as printer. Two thousand five hundred copies were to be thrown off as a first edition, and a prospectus having been composed it was given to the press, and Wilson in his enthusiasm already contemplated the establishment of an agent "in almost every town of the Union."

The hard work of preparation, added to his daily routine duties, impaired his health, compelling him to occasional periods of relaxation. These he utilized by excursions to the country, which he enjoyed the more that his professional duties were sedentary and exhausting, "immersed," as he describes himself "among musty books, and compelled to forego the harmony of the woods."

"At length," writes Mr. Ord, "in the month of September, 1808, the first volume of the 'American Ornithology' made its appearance. From the date of the arrangement with the publisher a prospectus had been issued wherein the nature and intended execution of the work were specified. But yet no one appeared to entertain an adequate idea of the treat which was about to be afforded to the lovers of the fine arts, and of elegant literature; and when the superb volume was presented to the public their delight was equalled only by their astonishment that America, as yet in its infancy, should produce an original work in science which could vie in its essentials

with the proudest productions of a similar nature of the European world."

It was a proud moment for Wilson when the first volume issued from the press, and met with a reception which his biographer tells us "was far beyond his hopes." It was, perhaps, far beyond the hopes which he ventured to express openly, but a man of Wilson's sanguine temperament could not have failed to have indulged in the most extravagant hopes; at the same time indulgence in hopes does not necessarily involve confidence in their realization, and the favor with which the first volume was received created a pleasurable excitement which stimulated him to most exhaustive efforts for the creditable performance of his undertaking. He thought he could increase subscriptions at a distance by his presence and personal exertions, and decided to make a first tour of the New England States in pursuit of subscribers and birds, with which object he set out on the 21st of September, 1808, going by Boston to Maine, and back through the State of Vermont.

The records of this and of his numerous later journeys are best preserved in his correspondence, in which he embodied the most careful observations of all he saw, interspersed with his reflections, thus affording an insight not only into the progress of the work, but into his own character and moods. We shall draw freely on these letters, as it would be impossible to present him in a more natural light than he presents himself in them, but as they are for the most part spun out to great length we will content ourselves with giving extracts from them.

The first letter of the series was dated Boston, October 12, 1808, and addressed to Mr. Miller. It reads as follows:

"Dear Sir: I arrived hear on Sunday last after various adventures, the particulars of which, and the observations I have had leisure to make upon the passing scenery around me, I shall endeavor as far as possible to compress into this letter for your own satisfaction and that of my friends who may be interested for my welfare. At Princeton I bade my fellow travelers goodby, as I had to wait upon the reverend doctors of the college.

"I took my book under my arm, put several copies of the prospectus into my pocket, and walked up to this spacious sanctuary of literature. Dr. Smith, the President, and Dr. McLean, Professer of Natural History, were the only two I found at home. latter invited me to tea, and both were much surprised and pleased at the appearance of the work. I expected to receive some valuable information from Mr. McLean on the ornithology of the country, but I soon found to my astonishment that he scarcely knew a sparrow from a woodpecker. I visited several other literary characters, and about half-past eight the Pilot coming up I took my passage in it to New Brunswick, which we reached about midnight.

"The next morning was spent in visiting the few gentlemen who were likely to patronize my undertaking. I had another task of the same kind at Elizabethtown; and without tiring you with details that would fill a volume, I shall only say that I reached Newark that day, having gratified the curiosity and feasted the eyes of a great number of people, who repaid me with the most extravagant compliments, which I would have very willingly exchanged for a few simple subscriptions. I spent nearly the whole of Saturday in Newark, where my book attracted as many starers as a bear or a mammoth would have done, and I arrived in New York the same evening. The next day I wrote a number of letters, inclosing copies of the prospectus to different gentlemen in town, and on the afternoon of Tuesday I took my book, and waited on each of these gentlemen to whom I had written the preceding day. Among these I found some friends, but more admirers. The professors of Columbia College expressed much esteem for my performance. The professor of languages being a Scotchman and also a Wilson, seemed to feel all the pride of national partiality so common to his countrymen, and would have done me every favor in his power. I spent the whole of this week traversing the streets from one particular house to another, till, I believe. I became almost as well known as the public cryer, or the clerk of the market; for I frequently could perceive gentlemen point me out to others as I passed with my book under my arm.

"On Sunday morning, October 2, I went aboard a packet for New Haven, distant about ninety miles. The wind was favorable. The Sound here between Long Island and the main is narrowed to less than half a mile, and filled with small islands and numerous rocks under water, among which the tide roars and boils violently, and has proved fatal to many a seaman. At high water it is nearly as smooth as any other flow, and can then be safely passed. The country on the New York side is ornamented with handsome villas painted white and surrounded by great numbers of Lombardy poplars. The breeze increasing to a gale, in eight hours from the time we set sail the high, red-fronted mountain of New Haven rose to our view. In two hours more we landed, and by the stillness and solemnity of the streets recollected we were in New England, and that it was Sunday, which latter circumstance had been almost forgotten on board the packet boat. * * *

"The literati of New Haven received me with politeness and respect; and after making my usual rounds which occupied a day and a half, I set off for Middleton, twenty-two miles distant. * * * I waited on Mr. A. of this town, and by him was introduced to several others. He also furnished me with a good deal of information about the

birds of New England. He is a great sportsman, a man of fortune and education, and has a considerable number of stuffed birds, some of which he gave me, besides letters to several persons of influence in Boston. On reaching Hartford I waited on Mr. G., a member of Congress, who recommended me to several others, particularly a Mr. W., a gentleman of taste and fortune, who was extremely obliging. The publisher of a newspaper here expressed the highest admiration of the work, and has since paid many handsome compliments to it in his publication, as three other editors did in New York. This is a species of currency that will neither purchase plates nor pay the printer, but, nevertheless, it is gratifying to the vanity of an author when nothing better can be got. * * * It was dark when I entered Boston, of which I shall give you some account in my next. I have visited the celebrated Bunker's Hill. and no devout pilgrim ever approached the sacred tomb of his holy prophet with more awful enthusiasm and profound veneration than I felt in tracing the grass-grown intrenchments of this hallowed spot made immortal by the bravery of those heroes who defended it-whose ashes are now mingled with its soil, and of whom a mean, beggarly pillar of bricks is all the memento."

His next letter to the same gentleman is dated Windsor, Vermont, October 26. remained nearly a week in Boston journeying through the streets with his book, and visiting all the literary characters he could meet with. Thence he traveled on through New Hampshire, stopping at every place where he thought it was likely he would do any business, going as far as Portland, Maine, where he staid three days. Here he directed his course across country "among dreary savage glens, and mountains covered with pines and hemlocks, amid whose black and half burnt trunks the everlasting rocks and stones grinned horribly." A journey of one hundred and fifty-seven

miles brought him to Dartmouth College, New Hampshire, on the Vermont line, here he paid his addresses to the reverend fathers of literature, and appears to have been very well received. "Dr. Wheelock, the President of the college," he tells us, "made me eat at his table, and the professors vied with each other to oblige me."

"I expect," he continued, "to be in Albany in five days, and if the Legislature be sitting I shall be detained perhaps three days there. In eight days more I hope to be in Philadelphhia. I have labored with the zeal of a knight-errant in exhibiting this book of mine, wherever I went, traveling with it, like a beggar with his bantling, from town to town, and from one country to another. I have been loaded with praises, with compliments and with kindnesses; shaken almost to pieces in stage coaches; I have wandered among strangers hearing the same oh's and ah's, and telling the same story a thousand times over, and for what? Aye, that's it! You are very anxious to know, and shall know the whole when I reach Philadelphia."

In a letter to Mr. Alexander Lawson, written during this visit to Albany, he writes: "And in the first place I ought to thank you for the thousands of compliments I have received for my birds from persons of all descriptions, which were chiefly due to the tact and skill of the engravers. In short the book in all its parts so far exceeds the ideas and expectations of the first literary characters in the eastern sections of the United States as to command their admiration and respect. The only objection has been the price of one hundred and twenty dollars, which in innumerable instances has risen like an evil genius between me and my hopes. Yet, I doubt not, but when those copies subscribed for are delivered, and the book a little better known, the whole number will be disposed of; and perhaps encouragement given to go on with the rest. To effect this, to me, most desirable object, I have encountered the fatigues of a long, circuitous and expensive journey, with a zeal which has increased with increasing difficulties; and sorry I am to say that the whole number of subscribers which I have obtained amounts only to forty-one."

Wilson remained at home only a few days when he again set off on a journey through the South, visiting every town of importance as far as Savannah in the State of Georgia, during which journey he suffered considerably from the inclemency of the weather,

and from the fatigue of the journey, but he was gratified by it, having, as we find from a letter to Mr. Bartram, written on the eve of his departure from Savannah, gained his point in procuring two hundred and fifty subscibers in all for his Ornithology, and a great mass of information respecting the birds that winter in the Southern States, and some that never visit the Middle States; "information," he adds, "which I have derived personally, and can, therefore, the more certainly depend upon it."

CHARLEY'S WONDERFUL JOURNEYS.

JOURNEY X.

"Here he comes," said one of the little Bears. "Now keep quiet, and he'll walk right into the trap."

And sure enough poor Charley walked right into it. There was nothing unusual looking with the grass, but as soon as Charley got his foot into it he was tripped up and fell forward on his hands. The next moment the two little Bears pounced on him from behind and caught him one by each arm.

"See if he has any guns or knives," said one of them excitedly, as they raised Charley to a standing posture.

"I haven't any guns or knives," said Charley. "I wouldn't kill anybody, and I don't want to hurt you, but I wish you would let me go, please."

The Bears looked at each other, delighted at hearing that Charley could talk. "Can you dance, too?" asked one of them.

"Yes," said Charley, "I went to a Bear party once, but, please don't hold my arms so tight, you hurt me."

"But won't you run away if we let go?" asked one of the Bears.

"I'll tell you," said the other, "let's make a rope, and tie him round the waist, and then he can't run away."

So one of the Bears held Charley, while the other made a grass rope, and tied it round his waist. "Now let us see you dance," said he.

"If you dance nicely," said the other, "you shall have a whole can of black-berries by and by."

So Charley began to dance, and the Bears held their sides and laughed till the tears ran down.

Then one of them asked him to show how he ran on all fours, and Charley did his best, he didn't think he did it very well, but the Bears laughed and shouted and fairly rolled over and over with delight.

"Oh, isn't this fun," said one, "we'll take him all through the woods and exhibit him everywhere, and make lots of money; let's take him home first and show him to the old folks."

"Oh, let him ride on me," said the other, "we'll go home with Charley riding on my back, and won't the old folks be astonished when they see us!"

When they got to the cave, the old dad Bear was lazily stretched on a rock sunning himself, and you may imagine his surprise when he saw his two cubs coming home with Charley riding one of them. "Whatever have you got there?" said he, springing to his feet.

"Call mam," said the cubs; "we set a trap in the grass and caught a little man cub."

"Take him away," said the old she Bear, when she came out, "you shan't bring him in here, they are dangerous creatures to have anything to do with."

"Oh, this one isn't dangerous," said they, "he can talk and dance, and he's go and show him to our cousins in the big elm. Jump up, Charley."

Away they went up the hill, scrambling over rock and fallen trees, down the other side, and across the brook, and then up into the forest where the big elm was.

When they got near, they saw two of the young Bears playing outside, and as soon as these saw the two Bears coming with Charley, they rushed for the hole at the root of the old elm, shouting "Mam—dad."



THE TWO LITTLE BEARS CAUGHT HIM ONE BY EACH ARM.

quite tame, and we're going to exhibit him all through the woods and make lots of money. "Get down, Charley, and let them see how you can dance."

Charley did as he was told, and the old Bears couldn't help laughing, and when Charley went down on all fours and began to run the old folks enjoyed it as much as anybody and declared they had never seen anything like it.

"I won't have him come in the cave," said the she Bear, "but you may take him round and exhibit him if you like, but be careful you don't get into any mischief."

"Come on," said one of the cubs, "we'll

The elm was big, but it was only an old hollow trunk with all the branches broken off, and the next moment Charley looked up and there were the two old Bears, who had climbed to the top, and were looking down on them.

"Don't be frightened," said Charley, "they are only exhibiting me on a dancing tour."

"Come down, aunty," said his companions and keepers, we've caught a young Man cub and he's quite tame, and he can talk, and dance and go on all fours beautifully."

At this the old ones scrambled down

and came out from the lower hole, followed by five young ones, and the story of the capture was told all over again, and Charley said "he didn't mind."

Then Charley began to dance, and old and young shook their sides with laughter, the old ones laughed till the tears ran down their cheeks, and the young ones rolled over and turned somersaults and cheered until they were out of breath.

At last Charley was fairly out of breath, too, and sat down on a log, and his captors asked the audience for a supply of Bear's grease to take home with them.

"We are rather short of Bear's grease now," said the old mam, "and don't expect to have much until after harvest, but you young ones can all take the pails, and go raspberrying up in the clearing."

The young ones shouted with glee, and ran off and fetched the pails, and brought two for their cousins, and one for Charley, and every one wanted to have Charley ride on his back, but Charley's captor wouldn't trust him with any of them, so he jumped up on his former seat and away they trotted to the clearing, jingling their pails and laughing and talking.

The raspberries were very plentiful, and the Bears rushed here and there wherever they saw them thickest, and Charley was soon left alone. He had nearly half filled his pail, besides eating a great many, when he heard a fearful yell, and one of the Bears shouting, "Help, help, I'm caught in a trap."

"Run, run," shouted the others, and the next moment they dashed off in all directions without thinking of Charley.

The captured Bear was still howling, and Charley went toward him to try if he could help, but when he came to the top of the hill, to the place where he heard the howling, he saw the Bear with his fore paw in a big trap, rushing down toward the brook, and dragging after him a big log which was tied to the trap, and as Charley looked

he saw the log jump up and knock the bear over, and both together go rolling one over the other down toward the brook, and the Bear yelling savagely.

"He appears to have lost his temper," said Charley, "but perhaps I may as well go down; he may like to have somebody to talk to."

"You've been and put your foot in it now," said the Fox as Charley reached the scene; "you should be more careful. It's better to walk twice round a trap than once into it."

"Oh, stop your confounded moralizing," said the Bear. "I wish it was your head in it instead of my foot. Boo-o-o-o."

"Of two evils I always choose the least," said the Fox; "and if you won't listen to good advice, you must just grin and bear it, but if you'd listen to me, you'd have your foot out in no time. It's very painful, isn't it?"

"Oh, it's dreadful," said the Bear, "and if you would help me get my foot out, I'd be your friend for life. Come now, I know you're a clever little fellow."

"Oh, yes," said the Fox, "you're ready enough to make promises, but very likely if I showed you how to get your foot out, you'd be ready to snap my nose off the next minute."

"Oh, no, Cousin Reynard," said thebear. "I'm not that sort of fellow at all. Only show me how to get my paw out and. I'll be eternally obliged to you."

"Nothing more simple," said the Fox, just push in your nose as far as you can, then open your jaws and pry the trap open, and your foot will come out quite easily."

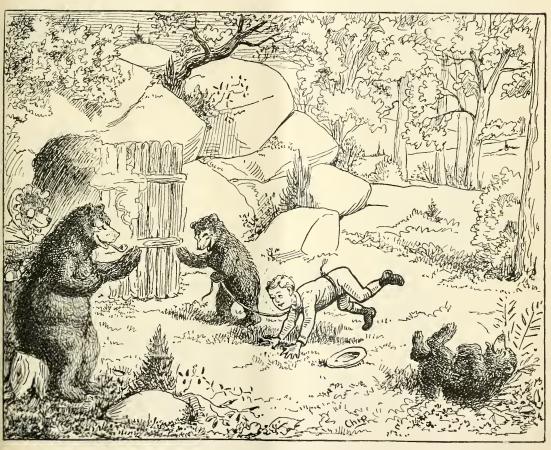
The Bear did as he was told and drew out his paw with a sigh of relief, but when he tried to pull his nose out, he found he was in a worse fix than ever and howled and danced about with rage.

"Oh, you wretch," said he to the Fox,, "let me only once get hold of you."

"Fine gratitude that for showing you how to get your paw out, and it would only serve you right if I were to go off and leave you in your present fix for the trapper to help you out at the price of your skin," said the Fox; "but it's wrong to bear malice," continued he, "and now that

glad of anything for a change, and all you've got to do is to open your jaws wide, put in both paws as far as they'll go, then shut your mouth and your head will come out easily."

The Bear knew now that the Fox was laughing at him, and, setting both paws



CHARLEY WENT DOWN ON ALL FOURS AND BEGAN TO RUN.

you've got your paw out, it's just as easy to get your nose out, if you'll only do as I tell you."

"Oh, do tell me," said the Bear; "I didn't mean what I said; but it hurts so. I only wish you had your head in it for a minute and then you'd know."

"Yes," said the Fox, with a sly wink at Charley; "I can well believe that you'd be

upon the trap, he determined to pull his nose out even if he pulled all the skin off, but, more by good luck than judgment, he got the trap upright, and placed both paws upon the springs; to the astonishment of everybody the jaws of the trap flew open, and the released Bear went for the grinning Fox with a bound.

The Fox turned tail like lightning; but,

alas, he was not quite quick enough; in turning, he whisked his tail into the mouth of the Bear, who snapped on it so viciously, that he bit it off close to the stump, and away went the Fox as fast as his legs could carry him; the Bear dropped the brush and followed at best speed, and Charley picked it up and trotted after them to see what would happen next.

Alas for the uncertainty of mundane affairs! The Fox knew every trap on the run, but in his hurry to get away from the Bear, he never thought where he was going until he put his foot into a trap, and rolled over with a sharp how!.

"Well," said the Bear, as he sat down and contemplated the Fox with a grin of satisfaction, "of two evils it's always wise to choose the least."

"Oh, Cousin Bruin," said the Fox, "help me out like a good fellow. You never would have got out if it hadn't been for my advice, and now if you will only put your paws upon the springs, and let me get my foot out, I'll never forget it."

"I won't be beaten by a Fox in generosity," said the Bear. "It was very foolish of you to put your foot in it. "Twould have been wiser to walk twice round it than once into it; still I must admit that you were in a hurry, and you are welcome to the advice I got from a very clever fellow when I was there myself. Just push your nose into the trap and pry open the jaws, and your foot will come out quite easily."

The Fox groaned; then, suddenly bethinking himself of a ruse, he said: "I know of a bee's nest full of honey not far off, and if you'll only help me out I'll take you there at once, and you can have it all."

"So it is up a tree?" asked the Bear.

"Yes, up in a big hollow elm tree," said the Fox, who now began to hope; "you can get it quite easily."

"All right," said the Bear; "I'll go off in the woods and hide till you come. Here comes the trapper with his Dog, and he understands these darned traps better than I do, and you'll be glad of anything for a change. Good-by, Cousin Reynard. Tell me how you got along when we meet again. By the way, how are skins selling?" and with this parting shot away scampered the Bear.

Charley thought it time to go too; but he wanted to see what would happen next, so he went and hid behind a tree.

When the trapper came up, the Fox was lying as still as dead. The Dog ran in and seized him and began to shake him, but the Fox made no sign.

"Durn that Dog," said the trapper, "he'll spoil the skin. Down, Pincher. Dead!"

The trapper came up and lifted the Fox by one ear, and then let him drop; the Fox fell all in a heap, but the dog kept stern watch with his nose close to the Fox's throat.

The trapper then opened the trap and released his leg, turned him over with his foot, and, concluding that he was quite dead, set the trap again, seized the Fox by the hindlegs, swung him over his shoulder, and strode off to the next trap, the one the Bear had been caught in. The Fox opened his eyes, but the Dog was following close behind, ready to seize him at the first move.

When they reached the place, the trap was gone, and, as they passed over it, the Dog smelt bear's blood, and the hair on the back of his neck bristled with anger; he got another sniff, and, for a moment forgetting everything else, he ran off on the Bear's trail.

Now was the Fox's opportunity! He closed his jaws on the broadest part of the trapper's back, and sampled it with such a sudden snap, that the trapper yelled, and flung him off as suddenly.

Away went the Fox as fast as he could limp, and the Dog, recalled to duty, was soon after him. The Dog was gaining, but the sly Fox went for the nearest trap, keeping his eyes wide open. When he came to it, he put down his wounded leg with a groan, and jumped over the trap. The next moment the Dog plunged into it, and rolled over with a howl.

and tore with all his might, until, seeing the trapper running toward him, he thought it prudent to decamp, and went off with such mingled emotions as you may imagine.

The Dog was soon released, but he had no more appetite for Fox hunting that day.



"YOU'VE BEEN AND PUT YOUR FOOT IN IT," SAID THE FOX.

"Now, cousin," said the Fox, "the tables are turned. You little thought when you saw me in the trap just now, that our positions would be so soon changed, but such is life. It is laughable when you come to think of it, but I suppose I must try to help you out."

With that he sprung on the helpless Dog and gripped him by the ham and tugged "Will you give me your beautiful bunch of flowers?" asked the little girl of Charley, as he wandered off.

Charley raised his hand, and seeing that it was a beautiful bouquet of sweet scented flowers that he held up, he said: "I will give them to you with pleasure if you will show me the way home."

"I cannot go home with you," said the

girl, "because you live on the other side of the river now, but I will go with you to the river's bank, and give you a kiss which will put you to sleep here, and then you will wake again directly at home."

So Charley gave her the flowers and placed his hand in hers, and they wandered off together toward the river, through meadows in which flowers of the most beautiful colors and richest perfume were as thick as the green grass which formed a setting for them. Their feet hardly seemed to touch the rich carpet as they glided over it.

At last they came to the river, a broad bright shining river, and sat down on the green bank where the murmur of the water soothed Charley's senses, and made him feel as if it would be so nice to go to sleep there, with the girl's hand in his

"Let me kiss you now, Charley," said she, and as she bent over him, and he looked into her blue eyes, and felt the tresses upon his cheek, he knew her again. "It is Ethel," he said. "Ethel with the golden locks, shall I ever see you again?"

He fell asleep before she could reply, but he woke again in an instant, and was sure he heard her retreating footsteps, but when he opened his eyes, he was at home in bed, and the sound he heard was his mother's footsteps outside the door.

"Oh, mother," said he, "I've seen Ethel again! Ethel with the golden locks, and I didn't know her until she put her arms about me and was going to give me a kiss, and then I asked her if I should ever see her again, and before she had time to answer I fell asleep."

"Perhaps some day," said his mother, "you will see her on this side the river, and when she puts her arms around you and gives you a kiss, you will know her again, and be able to keep her always with you."

"I wish she went to my school," said Charley.

C. F. AMERY.

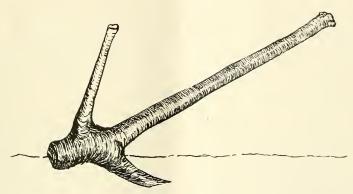
MAN'S DEPENDENCE ON THE LOWER ANIMALS.

In the Audubon Magazine for May, 1887, in an article under the title of "The Earth Builders," we took up the position that man could never have lived upon the earth but for the pre-existence of the lower types of life that preceded him, the general tenor of the argument employed being that the soil on which man is dependent for his food owes its fertility, and in great part its substance, to the decomposed animal and vegetable remains of past ages; that in the absence of such animal and vegetable remains in the soil, there could be no grasses, nor cereals, nor forest, growing on its surface, and no food for man or beast.

The earth was no doubt fitted for man's residence long before his first appearance, but notwithstanding that man is so far su-

perior to all other animals in intelligence, he was less fitted to supply his most pressing needs than almost any other animal. Even as a hunter he would have had a very sorry time, unless the dog had come to his assistance, and attached itself to him. But the purpose of the present article is to point out that man could not only never have reached any very high stage of civilization without the aid of the ox, the ass, the horse, or some other powerful animal, but what to many will appear still less credible, that we Americans of the nineteenth century, having risen to our present high stage of civilization and industrial development by the aid of the ox and horse, are still so dependent on them, that in spite of the enormous resources at our command, our civilization would not survive their annihilation; that with the disappearance of domestic cattle the great civilizations of the world would disappear, and existing society disintegrate into tribes which would sink to a very low level, from which they would again emerge to achieve a civilization comparable with that of the Incas of Peru at the date of the Spanish invasion.

Yes! it is a big debt that man owes to the domesticated animals! and especially to the ox, and if we could only justly estimate the extent of the obligation, we should see that it was not without good reason though the sowing of rice may have originated with broadcast sowings over areas liable to inundations, the tilling of the soil commenced by dropping each grain separately in a little hole made with a stick, from which an advance was made to the pick-shaped branch as a more effective implement, which may have been in use for centuries before it suggested itself to any one to take a much larger branch and drag it through the soil by means of oxen. Civilization may be said to rest on the practical application of this idea, for as long as man was dependent for his crops



A PRIMITIVE PLOW.

that the ancient Egyptians elevated the bull to the rank of a divinity, and that the Hindoos regarded the slaughter of an ox as an offense heinous as that of murder.

The plowing of the earliest agricultural people was with very rude implements. The Hindoo plow of to-day has retained its primitive form; the Egyptian is not appreciably modified; the same simple primitive plow may even still be seen in some parts of Germany, and a very little study of it will suffice to show that both it and the pick originated in the branch of a tree trimmed of all its secondary branches but two spurs which were left, one to penetrate and loosen the soil, the other to hold and guide it by.

There is little room for doubt that al-

on the work of his own hands, the labor exacted of him would have been so exhausting that there would have been no leisure for devotion to the useful arts, and under such conditions population could never become dense or highly civilized. The people of Europe and Asia, unaided by domestic cattle, would never have achieved a higher civilization than the people of America. It is generally supposed that native American races are of lower type, but there is a great mass of evidence in support of the view that in some remote past a colony from the old world (perhaps of men only) established itself about the northern coast of South America, giving origin to the semi-civilizations of Mexico and Peru, and by intermixture with aboriginal races, perhaps influencing the social condition of the whole continent North and South, and of all the facts that have been advanced in support of this theory I do not think that any one is so conclusive as the fact that the Peruvians dragged their plough through the soil instead of using it as a pick. They could not do nearly as effective work in this way as by digging, and such a method of loosening the soil would never have suggested itself to any people who had not grown familiar with it as the one recognized method of tillage.

Europe, like America, had its aboriginal savage races over its whole area before the Aryans effected settlements, and in every country in Europe the Aryan race has been modified by intermixture, and the difference between the civilization of Europe and that of Central America at the time of the Spanish invasion was no more than—on the assumption of equal aptitude for civilization—might be fairly attributed to the fact that the former people had domesticated the ox and the horse, while the latter had not. The history of the world affords no instance of a higher civilization than that of early America having been achieved by any people who had not the ox under domestication. These are truths that would be readily accepted by any one giving the subject even a very slight consideration, but it does appear almost incredible at first glance, that Christendom deprived of its domestic cattle, would sink into barbarism in a generation; that in spite of our command of steam, and control of the forces of nature, we are not vet so far advanced that we dare kick away the ladder by which we have mounted.

The first idea to suggest itself is that the loss of our draught cattle which would be most felt by the farmers would be promptly replaced by steam ploughs and implements of all kinds, that we could run light railways in all directions to get the engines and implements to the farms, and bring the products away, but a very little calculation will serve to upset that delusion. The whole manual labor of the country would be inadequate to the construction and maintenance of the necessary railways, and this of course would involve an utter suspension of manufactures and arts, and the desertion of the cities, which would render the railways useless; this would be followed by the establishment of local communities, cessation of all intercourse between people at a distance, and the rapid lapse into a a simple agricultural community, attended with enormous loss of life from starvation unless at the outset strenuous and well organized measures were adopted for cutting up the arable land into small farms of one or two acres, transporting the city population to them and providing for the proper distribution of food and seed.

It is just possible that the social organization could be maintained over the crisis, provided the effects of the calamity were foreseen and intelligently provided for, but this achieved, the organism would be disintegrated into a thousand separate communities with individual and opposing interests; and perhaps generations of anarchy would have to be passed through before any enduring system of social organization would be again achieved. Ninetenths of the population would have to be devoted exclusively to agriculture, the other tenth being employed in mining and the ruder arts; and as existing stocks of manufactured articles got worn out they would be replaced by ruder ones. Letters would be forgotten in a generation or two, in fact, all the energies of the people would be required to raise the necessary food supply, and a few centuries later the civilization of the nineteenth century would be a dim tradition of the past.

It is well within the range of possibility that with the progress of man's control over the forces of nature, and the advance of chemical science, man may achieve a position of complete independence of any aid that the lower animals may be able to render him. The day may possibly come when man will people the earth so densely that the beast must go to make room for him. These are speculations only, mean-

time it is a substantial fact, and a wholesome one to meditate upon, when we meet an ox or a horse in the street, that they are our powerful auxiliaries in the rude contest with nature, and stand between us and a condition but little removed from barbarism.

THE SONG SPARROW.

AN INVESTIGATION OF HIS LIFE HISTORY.

WITH a view to suggesting lines of investigation to those would-be workers who do not go the length of styling themselves ornithologists, these notes containing the subject matter of an address recently delivered at the Canadian Institute, were put in their present shape.

The rapid advance of ornithological science in our country during the last few years, and the systematic organization of the great body of working ornithologists of America, have had the satisfactory effect not only of stimulating the interest felt in the subject by that snowball process of increment that is a property of all knowledge, but also of demonstrating clearly to the lay following that all who have eyes may be of use, and all who would be of great use must keep their eyes in one direction.

Now, with any one who for the first time sees a new or unknown object, the three questions that naturally arise are: What is it? Where did you get it? and What is it for? i. e., we are asked its name, native place and nature; and it is the whole province of each branch of zoological science to answer these three questions with regard to its individual subjects. Or to illustrate to the point, ornithology treats of birds and is supposed to supply the student, first, with the name of each bird; second with information about its country or habitat; third

with information of its nature, which includes two very wide fields, the physical and the metaphysical, or anatomy and life history. The first of these questions, the which?, can be answered only by authorities profoundly versed in the subject, and the Check List of the American Ornithologist's Union contains the united opinions of the competent authorities of America.

The second question, the where?, comprising the whole subject of geographical distribution and migration, is partly answered already with regard to most of our birds. As it can be properly treated only by persons who have large collections of material at hand, and have given a great deal of time and study to the subject, here also it is better for the lay bird man to refrain from "rushing in."

But the last question, the what?, is the greatest of all. It naturally divides itself into two branches, anatomy and life history. With regard to the first, much the same remarks apply as in the preceding paragraph, but the second, the life history, is the most important, and affords the proper field for those who simply love nature for her own sake, and desire only to know the wild birds in their wildness. "The real history of a bird is its life history. The deepest interest attaches to everything that reveals the little mind, however feebly it may be developed,

which lies behind the feathers." So says the English ornithologist Seebohm, in his History of British Birds, and I am very sure that there is no lack of bird lovers to re-echo the sentiment. The first two questions are of very great importance, and of such a nature that they insist on first notice, but having settled them as we now have, sufficiently for the purposes of the ordinary observer of Eastern America, we are brought face to face with what is, after all, of chief interest, the great question of the "little mind."

The almost absolute ignorance that exists with regard to the life history of our birds is only beginning to be appreciated. We have, in fact, as a result of great labors during the last few years, only just succeeded in obtaining enough light to make the darkness visible. To show our utter nescience with regard to even the best known species, I would take for example the bird of all others we are supposed to be perfectly familiar with, the common barn fowl. How many of us can prove or disprove the simplest statements that can be made concerning it? How many can decide on the theory that a hen beginning to lay, lays on the first day early in the morning, next day an hour later, and so on until afternoon is reached, then a day is missed, and on the next day the bird begins again early in the morning? How many of us can contradict the statement that the hen is capable of real and faithful attachment to one particular male, even though several be in the yard? Which of us can say when and why the hen turns her eggs, or whether she knowingly turns them at all? It would be easy to go on exposing our ignorance, but sufficient has been said for my purpose, and I would now follow with the remark, if we know so little of our familiar domestic fowls, how insignificant must be our knowledge of the wild birds. I am so satisfied that a harvest of knowledge and pleasure awaits those who will venture into this

almost virgin field, that I have determined to spend one season at least in investigating the life history of a single species, and to the end that I may approach the subject systematically, I have tabulated the lines of investigation under seventeen heads These heads, be it noticed, are naturally limited by the knowledge and theories of the writer, but I believe that in working them out one will most assuredly stumble on clues which, properly followed, will lead to light most unexpected, and to ideas of startling newness that have not even been guessed at by the preliminary schedule, for such has ever been the experience of those who have blindly but earnestly groped after the truth.

For numerous reasons, more or less evident, I have selected the song sparrow (Melospiza fasciata) as the species for study, and propose collecting all possible evidence on the following items:

- 1. Spring Migration.—Give earliest appearance, etc.; state whether in flocks or singly; males in advance or both sexes together; by day or by night; crossing the lake or skirting its shores; flying high or low; recording in full the weather at the time of observation, also date, locality, etc. Does it hide or return southward during the late spring storms? Do individuals that come early differ from those that come late? If so, are both found breeding here?
- 2. Habitat.—Is it found in dry uplands, dense forests or marshes, or does it manifest a preference for the vicinity of water, or especially of running water? Can any reason be assigned for its choice of locality?
- 3. Voice of the Male.—Song and the variations of the same; height from ground when singing; time of day; alarm notes, song periods, song flight, song by night; influence of the weather.
- 4. Voice of the Female.—Song, if any, and full particulars as above.

- 5. Habits.—What are its peculiar tricks of attitude, motion and expression? Does it hop or run? Is its flight ever undulatory, like that of its relatives? Is it nocturnal or aquatic at all? Does it ever wade for food or swim to escape its enemies? Does it feed on the wing? Does it regurgitate pellets of indigestible matter? Does it indulge in any sort of play, especially in a social way? Does it enter holes or burrows? Does it distinguish poisonous plants or insects? How do individuals communicate with each other?
- 6. Condition of each Specimen.—Give full notes re genitalia watching for cases of sterility, hermaphroditism or disease, counting if possible the number of ova, especially of those enlarged; giving the general condition of the specimen; stating whether fat or lean, diseased or healthy, parasitized or not, internally or externally, and to what extent.
- 7 Food.—Give in full—contents of mouth, gullet and gizzard, and preserve the same in labeled phials.
- 8. Plumage.—Particularize each specimen in form, color and measurement, noting differences of sex, season, age, moult and locality.
- 9. Mating.—Note fully any courtship observed, with maneuvres of both birds, or competitions of rivals; is it ever polygamous? do the same birds remain paired throughout the season, or for more than a season?
- 10. Nesting.—Give full particulars of construction, materials, proximity to the ground and to the water of each nest, preserving, photographing or sketching the same, and observing whether covered over or approached by a covered way; giving details of laying, time between each oviposition, varia-

- tion of the eggs in size and color, stating whether those first laid are larger or more heavily marked than those laid later; are the eggs turned daily, and if so by which bird.
- of each. Are later broods less? How long is each cared for by the parents? Is the female first to desert her charge?
- 12. Cowbird Parasitism.—Is the song sparrow ever imposed upon by the cowbird? Particularize each case observed.
- 13. Young.—Give in full their habits, food, plumage, comparing them with their parents and with their near congeners. Are they ever fed from the crop of the parents? Is there any evidence of a late summer northward migration among them?
- 14. Relatives.—What are their nearest congeners? Compare them in range, local habitat, changes of plumage, etc.
- 15. Competitors.—With what species do they most actively come into competition in the struggle for life?
- 16. Natural Enemies.—Enumerate predatory birds, mammals, reptiles, etc. Also meteorological phenomena, and means employed to combat, elude or withstand in each case.
- 17. Fall Migration.—Particularize as in spring ditto, giving latest appearance. Does it arrive in the spring singly and go in the fall in flocks? Is it ever a winter resident here?

Of course no one would expect to elucidate many of these points in a single season, but it is believed that enough may be gathered to form a valuable contribution to ornithological literature, and to decide whether or not the investigation may ultimately be made a complete success.—

Ernest E. Thompson in Forest and Stream.

THE cuckoo is universally regarded as a soothsayer. It is believed that he foretells the number of years a person will live, according to his cries of "cuckoo." Swedish maidens inquire of him how long they will remain unmarried, but if he responds more than ten times, they say he is sitting on a bewitched bough, and no longer heed his prophecies. It is very important to note the direction whence his call is first heard, for if it be the north, the auditor will have woe and mourning in the course of the year; the east and west signify happiness; and the south, prosperity. A German legend relates that the cuckoo is an enchanted baker, or miller, which accounts for the dusty hue of his plumage. When times were hard he stole the dough belonging to poor people; and when the dough rose up in the oven, he took it out, and plucked off a large piece, exclaiming: "Gukuk!" "Oh, look!" God punished him for his theft by transforming him into a bird of prey, incessantly repeating his cry. In Servia the cuckoo is believed to be a maiden, who mourned the death of her brother until she was changed into this bird. The Russians have a similar legend.

In olden times the first day on which the call of the prophetic bird was heard, was kept as a festival in Westphalia. Whoever brought the joyful intelligence was rewarded with an egg, which he at once proceeded to fry and cat. He then greeted all he met with the words: "The cuckoo has called!" instead of bidding "Good-day." At Hilchenbach, in Westphalia, the fortunate person rolled on the grass, and this ceremony prevented back-ache during the ensuing year.

At Pill, in Tyrol, there is a strange theory that the cuckoo is hatched by robin-red-breasts, and begins by being a cuckoo for the first twelvemonth; then he becomes a hawk, during which period he devours his

foster-brothers; and finally, the third year, a sparrow-hawk.

The plover, the jay, the snipe, and the woodpecker are all weather prophets, particularly as regards thunderstorms. Plovers go by the name of "Our Lady's Doves." Their heads were used as a talisman against sorcery, and their eggs as a cure for witchcraft.

An old tradition declares that the jay falls into a trance during a thunderstorm. His flesh was considered beneficial in consumption, while his wings were believed to be the ornaments worn by witches at their diabolical gatherings. According to village tales, the jay is always the jester among the birds, and his appearance is a good omen.

The snipe is sometimes called "the thunder goat," and his head is likewise used as a charm.

The speckled woodpecker was considered sacred by other nations, as well as the Germans. Virgil and Ovid say that Picus, the son of Saturn, and father of Faunus, was transformed into a woodpecker. The Romans told how he assisted the wolf in feeding Romulus and Remus, and they believed him to be the favorite and companion of the God of War, which belief was shared by the Teutonic race. His tapping reminded them of Thor's hammer, whence he derives his peasant name of "the carpenter," and his incessant screaming before a storm naturally connected him with the Thunderer.

The flesh of the green woodpecker was good to eat, and was reckoned to be a remedy against epilepsy, and his gay plumage was evidently considered an especial distinction. He appears in popular tales and traditions as the heavenly messenger, and the fairies were wont to assume his form. Formerly the gray woodpecker was laid beneath the pillow of a child suffering from convulsions.

THE AUDUBON NOTE BOOK.

MEMBERSHIP RETURNS.

THE number of new members registered during the month of August was 229, bringing the grand total of registered members up to 47,644 at the close of the month. The increase of the month is due to the following sources:

New York	o 3	Ohio	. :	3
Massachusetts	63	Colorado	. :	2
Pennsylvania	3	Dist. Columbia		I
New Jersey	7	Delaware		5
Vermont	7	Maryland		9
Connecticut	II	North Carolina		I
Michigan	4	Florida		4
Minnesot		Kentucky		I
Illinois	4	Japan		I
Missouri	6			_
			22	Q

C. F. AMERY, General Secretary.

NOTES FROM PENNSYLVANIA.

Editor Audubon Magazine:

I send you these few notes which I have jotted down from time to time. The first day of having (in July) Willie brought in a tiny bird. It was found where the mowing machine had passed, and it was supposed the nest was destroyed. No trace, however, of that or the parent birds could be found. We could not tell what kind of a bird it was, although nearly feathered. The upright tail suggested a wren, but we hardly thought it one. The poor little waif cried continuously. Finally, after several attempts, we succeeded in getting it to take a little bread and milk from the point of a wooden toothpick. It then became quiet and was put in a small covered wicker basket. Toward evening it tucked its tiny head under its mite of a wing like any old bird and seemed quite comfortable. The basket was hung out of the reach of cats and we heard no more from him. The next morning he was very weak, would eat no more, and died before noon. This was probably all for the best, although we were glad to do all we could for it.

In another part of the meadow, after the machine and horse-rake had both passed, my husband found a meadow lark's nest. It was about the size of a robin's, although much more neat and trim. It was close to the ground and must have been low enough for the cutter bar of the mowing machine to pass over it. The teeth, too, of the rake must have passed closely on either side; yet it was entirely unharmed. Although tipped a little on one side, not one of the six dainty eggs were spilled out. They were the size of a robin's, white speckled with brown. Contrary to our expectations, the mother bird did

not desert her nest, although the teams were obliged to pass quite near in going to and coming from another meadow, several times a day. My husband placed a stake in the ground near, so no one would disturb it. Only part of the eggs hatched and soon after the young birds were fledged they all flew away.

The kingbirds in the pear tree were all able to fly about the tree the second day after they began to climb out on the edge of the nest. They then left the pear tree entirely, and although we often saw them all (the old birds and four young) on smaller trees quite close to the house, they never returned to the nest that we could find. A week or two after in a hard shower the limb with the nest was broken off and thrown to the ground. We were all glad that the birds were safely out of it.

LUCY LYMAN PEEK,

A DUCK IN A CHIMNEY.

SHERBROOKE, Que. - One day last June the household of one of our city residents were astonished at what they supposed was the unusual amount of noise made by swallows in one of the chimneys. As it continued at intervals for three days, the lady of the house investigated the chimney-opening in the cellar and thence extracted a live wild duck. Knowing I would be interested, she sent it to me. Its primaries were badly broken, but otherwise it was uninjured, as when I set it free on the river a mile or so from town, it had no difficulty in getting out of the way of a farmer's dog that had followed me unnoticed from the road. How did it get there? Down the chimney, of course. But what induced it to make such a mistake? I did not recognize the species, but it was not a wood-duck, or it would not have been so surprising. Is there any other kind that nests in trees and which might have made the mistake of thinking the chimney was a tree. - Jos. G. Walton, in Forest and Stream.

DURING the spring of this year we learn from reliable authority that in the one small town of Myers, Florida, the sales of white egret plumes amounted to \$14,000. The birds are not wholly exterminated but the old haunts are almost wholly deserted.

The general relaxation of Audubon work during the hottest months of the year as indicated by our registration list, leave it to be inferred that the higher moral sentiments do not flourish with the thermometer over ninety degrees Fahrenheit.

EMINENT PEOPLE ON BIRD PROTECTION.

OAK KNOLL, Danvers, Mass., 2nd mo., 20, 1886.

Editor Forest and Stream:

I heartily approve of the proposed Audubon Society. We are in a way to destroy both our forests and our birds. A society for the preservation of the latter has long been needed, and I hope it is not too late for the accomplishment of its objects.

I could almost wish that the shooters of the birds, the taxidermists who prepare their skins, and the fashionable wearers of their feathers might share the penalty which was visited upon the Ancient Mariner who shot the Albatross. Thy friend,

JOHN G. WHITTIER.

BROOKLYN, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I am heartily in sympathy with your purposes for the protection of birds, and should be glad to contribute any influence that I can to that end.

If there were no purchasers there would be no demand, and no reason for slaughtering these winged gems. But as only women create a demand, it rests upon them to stay this wanton destruction. I am sure that it is only necessary to bring before American women the cruelty of this "slaughter of the innocents" that fashion is carrying on, to secure a renunciation of this ornament and the salvation of birds.

On this subject the kind feelings, the taste, and æsthetic sympathy of the whole community are on your side, and if you persevere you will surely win.

HENRY WARD BEECHER.

CORNWALL-ON-HUDSON, N. Y., Eeb. 22, 1886.

Editor Forest and Stream:

You have indeed my hearty sympathy in every effort to prevent the slaughter of my innocent little neighbors and friends, the birds. In the destruction of forests and birds, the people of this land are inviting very great evils and inflicting wrongs on posterity which scarcely can be measured. The press should render it impossibe for women to sin thoughtlessly and ignorantly in demanding little birds for their adornment. The evil should be brought home so fully to the knowledge of all, that the continued wearing of our useful little birds should become the badge and indication of a callous, vulgar nature. You are doing a humane and patriotic work in exciting public aversion to one of the most cruel and stupid wrongs of the age.

Respectfully yours,
EDWARD P. ROE.

WEST PARK, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I scarcely need assure you that your undertaking to form a society for the protection of our wild birds against the ravages of the milliners and the sham scientific collectors has my warmest sympathy and approval. It is a barbarous taste which prompts our women and girls to appear upon the street with their head gear adorned with the scalps of our songsters; and it is mere vanity and affectation which prompts so many persons to make up cabinets of the nests and eggs of the same. The destruction of our birds from their natural enemies is immense, and this craze of the collectors, and folly of the milliners and their customers in addition, threatens their serious diminution.

I hope you may succeed in creating so strong a public sentiment upon the subject that the collectors of skins and eggs for the unworthy purposes of fashion or to indulge the vanity of pseudo-naturalists may suddenly find their occupation gone.

Please add my name to the list of the members of the AUDUBON SOCIETY. Very sincerely,

John Burroughs.

160 W. 59TH STREET, NEW YORK, Feb. 20, 1886.

Editor Forest and Stream:

No one who will take the trouble to give the matter a few moments' serious consideration can be in doubt, I think, as to the wisdom of organizing the AUDUBON SOCIETY, and I am thankful that such a step is contemplated. There is an element of savagery in the use of birds for personal decoration, which is in grotesque contrast with our boasts of civilization. But even the savage stops short, as a rule, with the feathers. It is only Christian people whothink it worth while to butcher a whole bird to adorn their head gear. I am sure, however, that this is largely from that unreflecting habit which is a leading vice in people who follow the fashions. But it is a vice; as Hood sang, when he wrote—

For evil is wrought By want of thought As well as by want of heart.

If the Audubon Society can teach men, and especially women, to think on this subject, half of the battle will have been won. Henry C. Potter.

ANDOVER, Mass., Feb. 21, 1886.

Editor Forest and Stream:

I am in earnest and indignant sympathy with the motive of any society organized to prevent the murder of birds for decorative purposes.

E. S. PHELPS.





THE KINGBIRD.

THE AUDUBON MAGAZINE.

VOL. II.

NOVEMBER, 1888.

No. 10.

THE KINGBIRD.

EW birds are better known to the children than the Kingbird. The eagle is commonly spoken of as the king of birds, but how empty is such a title when this little flycatcher appears upon the scene. For all his great size, for all his marvellous powers of flight, for all his keen curved beak and his great sharp crooked talons, the little Kingbird, which is scarcely larger than the eagle's bill, drives the great bird before him and makes him put forth all his speed to escape the constant attacks of his petty pursuer. There are many small birds which are possessed of sufficient courage to attack hawks, crows and other birds of prey, in the breeding season, when the latter approach their nests or threaten danger to their new fledged young, but the Kingbird never needs an excuse of this kind. As soon as a rapacious bird comes anywhere near him, he sallies forth to the battle, which indeed is always a very onesided one, and from which the tiny assailant always comes forth the conqueror. It is commonly supposed that this characteristic of the Kingbird is wholly a noble one, and deserving of nothing but praise, but we are not altogether sure that this is the case. It has occurred to us that perhaps the Kingbird is a captious petulant fellow, quarrelsome by nature and always on the lookout for somebody that he can bully and hector. The smaller birds, ready at

any moment, if attacked, to take refuge in a clump of bushes or among the thick branches of a tree, would not give him what he looks for-a fight, but the slowwinged hawks and crows offer him exactly the opportunity that he is in search of, and he can pester them to his heart's content. Their clumsy efforts to seize him, or to avoid his attacks, are all in vain. He easily evades the first and laughs at the last, and darting down on his victim from above he pecks and buffets him until weary of the sport. Perhaps this view of the Kingbird's character does him injustice. Certainly it is wholly opposed to the general idea which makes of this gray-coated little warrior a hero, a knight errant, sans peur, who is always fighting battles for others. We can hardly hope to learn what the truth is.

The Kingbird passes the winter in the South and on his return journey toward his breeding grounds reaches Louisiana, according to Audubon, by the middle of March, and the New England States about the first of May. During the summer they are scattered over almost the whole continent from the Gulf of Mexico to the 57th parallel of north latitude, where it was observed by Sir John Richardson. Common along the Atlantic seabord, it is also abundant on the great plains and in the foothills of the Rocky Mountains, and passing west of these, occurs in some numbers

in Idaho, Oregon and Washington Territory and sparingly in California.

When the Kingbird reaches the Northern States, it seems for a while rather subdued, as if fatigued by its long journey, but it soon recovers its spirits and becomes the sprightly vivacious bird we know so well. The birds now choose their mates and soon the pleasing toil of nest-building be-The site chosen varies indefinitely. Often it is in an apple tree in the orchard, or in a pear tree in the garden close to the house, but in our experience a favorite tree is the so-called buttonball, or sycamore, tree (Platanus occidentalis). The nest is usually so placed as to be supported at the bottom by the branch on which it rests and at the sides by one or more twigs rising from that branch so that it is doubly secure against accident from storms. The outside of the nest is composed of small twigs and weed stalks, roughly woven together; upon this are placed locks of wool, tufts of cotton or cow hair, and the whole is neatly lined with fine roots, grasses and horse In this warm nest are deposited the eggs, which are usually four in number, but sometimes six. They are large for the size of the bird, and when fresh are of delicate creamy hue, thickly spotted with large dots of bright brown. The creamy tint of the fresh egg is due to the yellow yolk which shows through the shell, for when the contents are removed, the color of the egg is a dead white. Two broods are often hatched and reared in a season.

The nest of the Kingbird is often built in the garden or in some tree quite close to the house, and the birds render an important service to man by driving away the predatory species which, but for them, might destroy the farmers' poultry. Moreover, their food, during the greater part of their sojourn with us, consists wholly of insects, of which they destroy vast numbers. In some parts of the country there is a prejudice against them from the fact

that they feed to some extent on honey bees, and this habit has given them the name of Bee Martin, and sometimes leads to their being killed, but as a rule every one has the friendliest feeling for the Kingbird, and desires his protection.

Toward autumn when the birds are making their preparations for their flight southward, the Kingbird eats various wild fruits, such as blackberries, pokeberries, and those of the dogwood, sassafras, red cedar, elder and Virginia creeper. Nuttall, who had an opportunity of observing one of these birds in confinement, made some observations on it which are sufficiently interesting to be quoted at length. He says: "Raisins, foreign currants, grapes, cherries, peaches, pears, and apples were never even tasted. when offered to a bird of this kind, which I had many months as my pensioner; of the last, when roasted, sometimes however a few mouthfuls were relished in the absence of other more agreeable diet. Berries he always swallowed whole, grasshoppers, if too large, were pounded and broken on the floor, as he held them in his bill. To manage the larger beetles was not so easy; these he struck repeatedly against the ground, and then turned them from side to side by throwing them dexterously into the air, after the manner of the toucan, and the insect was uniformly caught reversed as it descended, with the agility of a practiced cup-and-ball-player. At length the pieces of the beetle were swallowed, and he remained still to digest his morsel, tasting it distinctly, soon after it entered the stomach, as became obvious by the ruminating motion of his mandibles. When the soluble portion was taken up. large pellets of the indigestible wings, legs, and shells, as likewise the skins and seeds of berries, were, in half an hour or less, brought up and ejected from the mouth in the manner of the hawks and owls. When other food failed, he appeared very well satisfied with fresh minced meat, and drank

water frequently, even during the severe frosts of January, which he endured without much difficulty; basking, like Diogenes, in the feeble beams of the sun, which he followed round the room of his confinement, well satisfied when no intruder or companion threw him into the shade! Some very cold evenings he had the sagacity to retire under the shelter of a defending bed quilt; was very much pleased with the warmth and brilliancy of lamplight, and would eat freely at any hour of the night. Unacquainted with the deceptive nature of shadows, he sometimes snatched at them for the substances they resembled. Unlike the Vieros [sic] he retired to rest without hiding his head in the wing, and was extremely watchful though not abroad till after sunrise. His taciturnity and disinclination to friendship and familiarity in confinement, were striking traits. His restless, quick, and sideglancing eye enabled him to follow the motions of his flying prey, and to ascertain precisely the infallible instant of attack. He readily caught morsels of food in his bill before they reached the ground, when thrown across the room; and, on these occasions, seemed pleased with making the necessary exertion. He had also a practice of cautiously stretching out his neck, like a snake, and peeping about, either to obtain sight of his food, to watch any approach of danger, or to examine anything that appeared strange. At length we became so well acquainted, that when very hungry, he would express his gratitude on being fed, by a shrill twitter, and a lively look, which was the more remarkable as at nearly all other times he was entirely silent."

The Kingbird is swift of wing and very expert in the capture of winged insects, which he espies from his perch on a leafless branch, or the top of a tall mullein stalk, or a fence post, and pursues with almost unvarying success. He is rather a noisy bird and rarely leaves or returns to

his perch without uttering the shrill twittering cry so characteristic of this bird.

The southward migration of this species takes place much earlier than in most birds and generally all the Kingbirds have disappeared from New England by the early part of September. When migrating in August the flight of this species is quite different from the ordinary rapid fluttering so noticeable during the summer. It is now long and swinging, and not unlike that of a swallow, very easy and very rapid. The birds at this time travel in loose flocks of twenty-five or thirty, and are for the most part silent. The Kingbird passes the winter in the tropics.

It has been suggested that the bright orange patch on the Kingbird's crown is useful to the bird by attracting insects toward it. Thus Giraud, speaking of its habit of standing motionless on its perch for minutes at a time, says: "Many suppose it adopts this quiet attitude for the purpose of attracting passing insects, they mistaking the bright vermilion patch on its crown for a blossom, and in their eagerness to partake of the supposed nectar, the fatal error is not discovered until within reach of the beguiler's grasp." In a note on the same point, Mr. Chas. W. Brekham says: "Several years ago, in May, I saw one of these birds occupying an exposed perch on a pear tree in bloom, about which many bees were darting. Several times I observed that the bird caught the insects without leaving his perch by quickly turning his head and 'grabbing them.' My attention being thoroughly aroused, I noticed that many seemed to fly directly toward him; the majority appearing to 'shy off' a short distance and change their course, but very few that came within reach escaped him. The question naturally suggesting itself: Did the thrifty Hymenoptera [bees] mistake the fully displayed orange red crown (I could see that the crest was erected) for a flower? Once

since I have observed the same phenomenon, but not as well as upon this occasion. Mr. C. C. Nutty, who has spent considerable time in studying the birds of Costa Rica and Nicaragua in their native haunts, states that he has seen *Muscivon mexicana* perched upon a twig, and waving its curious and fanshaped crest after the manner of a flower swayed by a gentle breeze, and thus attracting insects within reach."

The Kingbird is a little over 8 inches long and measures more than 14 inches across

the extended wings. The general color of the upper part is damask or slate color, the head darker, being often nearly black. A small patch on the crown, concealed when the crest is not erected, is bright orange, bordered with yellow. The wings and tail are brownish black, the latter broadly tipped with white. There is a line of white across the wing. The lower parts are white, the feathers on the breast being tinged with ash color. The eye is brown and the bill and feet black.

ALEXANDER WILSON.

VI

WILSON'S first journey South, having resulted in raising the subscription list to his first volume to two hundred and fifty, it was thought expedient to throw off three hundred copies in addition to the first two hundred. The second volume, published in January, 1810, started with an impression of five hundred, and a fair proportion of subscribers, the work gaining fresh applause and support as it advanced. Simultaneously with the publication of his second volume, Wilson set out alone on another of his ornithological pilgrimages, and as very little record is left of the man beyond what is to be found in his correspondence, and as this is most complete, chronicling all the daily events of his life, with his unreserved comments and reflections on men and things, we will continue to let him speak for himself.

The first stage of his journey brought him to Pittsburgh, whence, on the 22d of February, 1810, he wrote to Mr. Alexander Lawson in the following strain:

"Dear Sir: From this stage of my ornithological pilgrimage I sit down with pleasure to give you some account of my adventures since we parted. On arriving at Lancaster I waited on the Governor, Secretary of State, and such other great folk as were likely to be useful to me. The Governor received me with civility, passed some good-natured compliments on the volumes, and readily added his name to my list. He seems an active man of plain good sense and little ceremony. Mr. L- I was introduced to many members of both houses: but I found them in general such a pitiful, squabbling, political mob—so split up and justling [sic] about the mere formalities of legislation without knowing anything of its realities-that I abandoned them in disgust. I must, however, except from the censure a few intelligent individuals, friends to science, and possessed of taste, who treated me with great kindness. I crossed the Susquehanna on Sunday forenoon, with some difficulty having to cut our way through the ice for several hundred yards; and passing on to York paid my respects to all the literati of that place without success. Five miles north of this town lives a very extraordinary character, between eighty and ninety years of age, who has lived by trapping birds and quadrupeds these thirty years. Dr. F- carried me out in a sleigh to see him; he has also promised to transmit to me such a collection of facts relating to this singular original, as will enable me to draw up an interesting narrative of him for the *Portfolio*. I carried him half a pound of snuff of which he is insatiably fond, taking it by handfuls. I was much diverted with the astonishment he expressed on looking at the plates of my work; he could tell me anecdotes of the greater part of the subjects of the first volume, and some of the second. One of his traps, which he says he invented himself, is remarkable for ingenuity and extremely simple.

"Having a letter from Dr. Muhlenberg to a clergyman in Hanover, I passed on through a well-cultivated country chiefly inhabited by Germans to that place, where a certain judge took upon himself to say, that such a book as mine ought not to be encouraged, as it was not within the reach of the commonalty, and therefore inconsistent with our republican institutions! the same mode of reasoning which I did not dispute, I undertook to prove him a greater culprit than myself in erecting a large, elegant, three-story brick house, so much beyond the reach of the commonalty as he called them, and consequently grossly contrary to our republican institutions. harangued this Solomon of the bench more seriously afterward, pointing out to him the great influence of science on a young rising nation like ours, and particularly the science of natural history, till he began to show such symptoms of intellect, as to seem ashamed of what he had said.

"From Hanover I passed through a thinly inhabited country, and crossing the North Mountain at a pass called Newman's Leap, arrived at Chambersburgh, whence I next morning returned to Carlisle, to visit the reverend doctors of the college.

"The towns of Chambersburgh and Shippensburgh produced me nothing. On Sunday the 11th I left the former of these places in a stage coach, and in fifteen miles began to ascend the alpine regions of the Alleghany mountains, where above,

around and below us, nothing appeared but prodigious declivities covered with woods; and the weather being fine, such a profound silence prevailed among these aerial solitudes, as impressed the soul with awe and a kind of fearful sublimity. Something of this arose from my being alone, having left the coach several miles below. These high ranges continued for more than one hundred miles to Greensburgh, thirtytwo miles from Pittsburgh. Thence the country is nothing but an assemblage of steep hills and deep valleys, descending rapidly till you reach within seven miles of this place, where I arrived on the 15th inst. We were within two miles of Pittsburgh when suddenly the road descends a very long and steep hill, where the Alleghany River is seen at hand, on the right, stretching along a rich bottom, and bounded by a high ridge of hills on the west. After following this road parallel with the river, and about a quarter of a mile from it, through a rich low valley, a cloud of black smoke at its extremity announced the town of Pittsburgh. On arriving at the town which stands on a low flat, and looks like a collection of blacksmiths' shops, glasshouses, breweries, forgeries, and furnaces, the Monongahela opened to the view, on the left running along the bottom of the range of hills, so high that the sun at this season sets to the town of Pittsburgh at a little past four. This range continues along the Ohio as far as the view reaches. ice had just begun to give way in Monongahela and came down in vast bodies for the three following days. It has now begun in the Alleghany and at the moment I write the river presents a white mass of rushing ice.

"The country beyond the Ohio to the west appears a monotonous and hilly region. The Monongahela is lined with arks usually called Kentucky boats, waiting for the rising of the river, and the absence of ice to descend.

"A perspective view of the town of Pittsburgh at this season with the numerous arks and covered keelboats, preparing to descend the Ohio-its hills, its great rivers. the pillars of smoke rising from its furnaces and glass works-would make a noble picture. I began a very diligent search in this place the day after my arrival for subscribers, and continued it for four days. I succeeded beyond expectation, having got nineteen names of the most wealthy and respectable part of the inhabitants. The industry of Pittsburgh is remarkable; everybody you see is busy; and as a proof of the prosperity of the place an eminent lawyer told me there has not been one suit instituted against a merchant of the town these three years.

"Gentlemen here assure me that the road to Chilocothee is impassable on foot by reason of the freshets. I have therefore resolved to navigate myself in a small skiff, which I have bought and named the 'Ornithologist' down to Cincinnati, a distance of five hundred and twenty-eight miles, intending to visit five or six towns that lie in my way. From Cincinnati I will cross over to the opposite shore, and, abandoning my boat, make my way to Lexington, where I expect to be ere your letter can reach that place. Were I to go by Chilocothee, I should miss five towns as large as it.

"Some say that I ought not to attempt going down by myself—others think I may. I am determined to make the experiment, the expense of hiring a rower being considerable. As soon as the ice clears out of the Alleghany, and the weather will permit, I shall shove off, having everything in readiness. I have ransacked the woods and fields here without finding a single bird new to me, or indeed anything but a few snowbirds and sparrows. I expect to have something interesting to communicate in my next.

"February 23. My baggage is on board; I have just to dispatch this and set

off. The weather is fine, and I have no doubt of piloting my skiff in safety to Cincinnati. Farewell, God bless you."

These solitary wanderings of Wilson as described in his letters are deeply interesting, not alone from their bearing on his own fortunes, but still more for their vivid pictures of the life of the time. His next letter from Lexington, dated April 4th, to the address of Mr. Alexander Lawson, appears to be a compilation from a well-kept diary, and takes up his adventures from the date of his leaving Pittsburgh and records them in one unbroken narrative down to the date of writing, but it is so long, that we can give only a portion of it in this number:

"MY DEAR SIR: Having now reached the second stage of my bird-catching expedition, I willingly sit down to give you some account of my adventures and remarks since leaving Pittsburgh; by the aid of a good map and your usual stock of patience you will be able to listen to my story and trace all my wanderings. Though generally dissuaded from venturing by myself on so long a voyage down the Ohio in an open skiff, I considered this mode, with all its inconveniences, as the most favorable to my researches, and the most suitable to my funds; and I determined accordingly. Two days before my departure the Alleghany River was one wide torrent of broken ice, and I calculated on experiencing considerable difficulties on this score. My stock of provisions consisted of some biscuit and cheese, and a bottle of cordial, presented me by a gentleman of Pittsburgh; my gun, trunk, and great coat occupied one end of the boat; I had a small tin occasionally to bail her and to take my beverage from the Ohio with; and, bidding adieu to the smoky confines of Pitt, I launched into the stream, and soon winded away among the hills that everywhere enclose this noble river. The weather was warm and serene, and the river like a mirror except when

floating masses of ice spotted its surface, and which required some care to steer clear off; but these to my surprise in less than a day's sailing totally disappeared. Far from being concerned at my new situation, I felt my heart expand with joy at the novelties which surrounded me: I listened with pleasure to the whistling of the red birds on the banks as I passed, and contemplated the forest scenery as it receded with increasing delight. The smoke of the numerous sugar camps rising lazily among the mountains, gave great effect to the varying landscape; and the grotesque log cabins that here and there opened from the woods, were diminished into mere dog-

houses by the sublimity of the impending mountains. If you suppose to yourself two parallel ranges of forest-covered hills. whose irregular summits are seldom more than three or four miles apart, winding through an immense extent of country, and enclosing a river half a mile wide, which alternately washes the steep declivity on one side, and leaves a rich forest-clad bottom on the other, of a mile or so in breadth, and you will have a pretty correct idea of the appearance of the Ohio. The banks of these rich flats are from twenty to sixty and eighty feet high, and even these last were within a few feet of being overflowed in December, 1808."

REINTRODUCTION OF FEATHER MILLINERY.

W E learn from sources that are unfortunately but too reliable, that the Parisian mondaines or demi-mondaines, who dictate the fashions to the women of the civilized world, have decided that feathers are to be *de rigeur* this winter.

It might be interesting, but would probably be difficult to ascertain whether the movement set on foot in England and the United States for the protection of birds had in any way roused the antagonism of the leaders of fashion and provoked a determination to put forth their strength and demonstrate their omnipotence within their chosen domain; but we candidly confess we do not believe they gave the Audubon and Selbourne Societies even a passing thought. It is so much a matter of course that the lead of a certain coterie will be followed with blind obedience by all the world, that the idea that women anywhere would recognize any higher authority, or allow themselves to be influenced to reject the fashion set by the recognized leaders is one seemingly too absurd to be entertained seriously. The suggestion that the Audubon Society or the moral idea it

represents could influence the women of America to reject the Paris fashion of feather millinery while feathers were obtainable for money, would do no more than provoke an amused smile.

It is not quite a fair statement of the case to say that the demi-mondaines set the fashion, and that the average woman will follow them regardless of all considerations. Demi-mondaines frequently, perhaps generally, suggest the fashions by daring to appear in public in a costume which is some departure from the prevailing mode, but this departure must commend itself to a few leading dressmakers and leading women in society before it can become the fashion. These arbiters of fashion being essentially women of the world, realize instinctively the considerations or impulse by which the average woman is influenced and would never run counter to the popular sentiment, nor consciously endanger their imperial sway.

The proposed return to feather millinery is evidence that the leaders of fashion have either not taken the movement for the protection of birds into consideration at all, or they assume that it is confined to so incon-

siderable a minority of womankind, that its members may be regarded as more or less harmless enthusiasts, whose idiosyncracies are not deserving of consideration.

As regards the merely sentimental aspect of the question of feather millinery the woman of the world holds an apparently strong position. Man always has sacrificed life for his daily food, and for skins for warmth, comfort, convenience, luxury, and display, and she sees no difference in principle between the sacrifice of birds for millinery and the sacrifice of other animals for rugs, furs, gloves, etc. It does not occur to her that birds contribute so greatly to man's well being by their services in preying on insects and small rodents, and to his enjoyment by their beauty, vivacity, and song, that their annihilation would be a crime against humanity, but this is precisely the aspect in which a great many American women regard it; the aspect in which there is good reason to believe the women of America as a body might be brought to regard it, if means were available for enlightening them on the subject and enlisting their judgment and sympathies in behalf of bird protection.

Phenomenal as has been the growth of the Audubon Society, its fifty thousand members constitute less than one in a thousand of our population; and widely although we have advertised the movement, the Society with its methods and aims is probably not known to one in a hundred of the people of the United States. We have about a thousand Local Secretaries in as many towns; outside those towns very few people have heard of the Society, and even in the large towns in which we have the greatest number of members, the Society is wholly unknown in many cases to the great majority of the people, the Local Secretary having perhaps worked almost wholly among people of one religious denomination; and, judging from the measure of success we have achieved both with

adults and young people, there appears reasonable ground to believe, that if the whole country were thoroughly canvassed and worked up on the subject we might not perhaps get a majority in favor of bird protection, but we would secure so influential a minority that the fashion of feather millinery could not survive its opposition although all Paris were enlisted in its support.

The machinery for such an extension of the work is wanting, and while under any circumstances there are fifty thousand persons prepared to enter their protest against the wanton destruction of millions of our small birds, the question of the reintroduction of small bird adornment into this country depends neither on them nor on the women of America in the collective sense in which the expression is ordinarily used, but on a small coterie of American women, numbering at most only a few hundreds; the acknowledged social leaders in our principal cities. For them the reintroduction of feather millinery in Paris would afford an opportunity for a splendid triumph. No American woman wants to adorn herself with dead birds, excepting from a desire for conformity to those around her, and if the social leaders of the women in America were to take the law in their own hands, and decide against feather millinery, the Parisian leaders of fashion, shocked at their loss of influence in so important a province of their domain, would at once seek to rehabilitate themselves by reverting to a fashion which would be universally followed.

The aspect of the question which concerns us more nearly, is that the average American woman is amenable to good influences and that the solution of the problem of bird protection rests on the organization of adequate machinery to force her attention to the humane and economic aspects of the question and secure her support.

K IND reader, will you follow me for a you that peculiar feathered sage and philosopher, the stork. I say sage and philosopher, because, to look at him and closely watch his habits, one is instinctively led to the conclusion that if any bird possesses powers akin to human wisdom and reasoning faculties, he is the one. I allude, of course, to that stork which annually makes his flight from the valley of the historic Nile to the meadows and chimney tops of the valley of the classic Rhine, there to build its nest, lay its eggs and hatch its young, spend the summer in that delightful climate, and with his increased army, marshalled in the lowlands, take his flight again to the former country in the fall.

During a stay of nine months in the grand old cathedral town of Strassburg, in Alsace, I was afforded an opportunity to study the character and peculiarities of this interesting creature, and never shall I regret it. It opened to me a new volume. as it were, on the subject of ornithology, and I studied its pages with a satisfaction and pleasure which has left a life-long impression on my mind. By daily, yea hourly, observations, I followed the doings of the different "pairs" as they commenced the work of repairing the nests of former years, generally situated on the highest chimneys of the city. After this was attended to the female deposited her eggs, and the process of incubation commenced. After a while uncouth little woolly heads, with disproportionately long bills, appeared to the gaze. In the course of time these bills and heads grew into birds with bodies, and soon showed themselves above the edge of the nest, then the first rudiments of flying were taught them by the parent birds, who by some of the most ludicrous movements in gymnastics, went through the motions

by rising above the nest a few yards, then dropping down again and anon flying from the nest to the peak of the roof and back again, until the young, seeming to understand what it was all about, finally imitated the movements and thus from day to day improved in their education until, fully fledged, they ventured out through the air with the parents, to seek their own food. But the most interesting part of the whole programme was to observe them forming their detachments preparatory to their migratory flight to Egypt in the fall of the year. Conventions, or reviews, were held in the meadows, now almost bare of vegetation. The thin ice covering the shallow waters of the lowlands in the morning was an admonition that the time for flight was near at hand, because the supply of frogs and lizards was shut off for the season, and to stav would mean to starve. The companies were mustered and formed, and the storks that were seen on the meadows yesterday were gone to-day. It is said by people living in that country, that previous to starting on their long journey, all the disabled companions are killed by the others, because such unfortunates might impede the flight, but I cannot vouch for this evidence of the forethought of the bird, because I never saw it. But if the following, which I have translated from the French, is true (and I believe it is), it leaves very little doubt on my mind as to the truth of the former, and is but another convincing proof of the extraordinary "reasoning power" of this wonderful feathered nomad.

Mons. Piton, of Strassburg, relates the following, and adds that, had it occurred in the days of Shakespeare, it might have furnished him the plot for a tragedy:

"On the western side of the Münster (Cathedral) we have annually a number of

those Egyptian emigrants (storks) settled, and it affords me unbounded pleasure to watch them in their curious habits. I have witnessed the arrival of their advance guard. I saw them select their quarters and afterward selecting their mates, build their nests, deposit their eggs, hatch their young, nursing them with parental affection, feeding, raising and teaching them to fly, to prepare them for their later long and tedious emigration.

"I frequently ascended the Münster for the purpose of sketching the beautiful landscape with the view of painting a panorama, employing a large telescope to bring the objects nearer to my eyes. It was at this time that the annual stork flocks arrived. As they arrived, each sought his mate—they separated in pairs —but one luckless stiltleg, in spite of all his amorous attentions, found it impossible to win his bride; the object of his affection bestowed her love upon another.

"The young couple were happy, while the disappointed rival, now a dreamy bachelor, sat gloomy and sad, his neck drawn in, on an adjoining chimney, looking the picture of ruined hopes, and regarding with evident hate and jealousy the happy pair near him. Melancholy was breeding vengeance; murderous thoughts filled his heart. I saw the mother patiently hatching until finally the young were prepared to emerge from the eggs. The hateful big-headed little things, clothed in yellow down, could already raise their heads and produce a shrill whistling sound, when the watching mother, with cheerful chatter, welcomed the returning father who emptied his well-filled crop of its load of frogs and lizards into the nest. The splenetic rival, hatred hatching, still sat upon the chimney, casting malicious glances down upon the happy scene.

"On a certain day, while both parents were absent, I saw a stork descending, and with relentless strokes sinking his bill into the flesh of the young ones. Through my

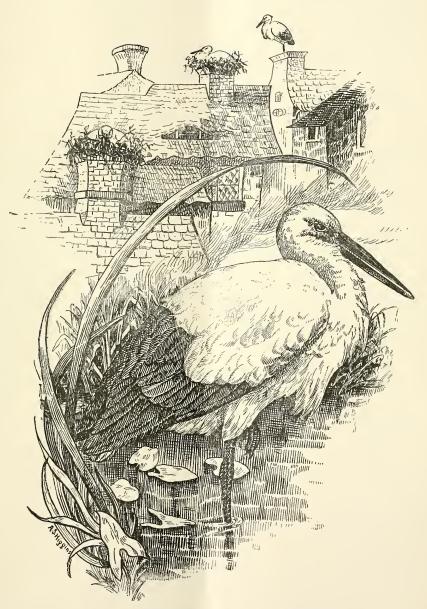
glass I saw the blood flow, the little heads sink and they lay cold in death. After committing the bloody deed, the murderer again perched himself upon the solitary chimney. Jealousy, insulted dignity, unreciprocated love, were the motives for the crime. Soon the mother appeared, hovering over the nest, and, seeing her little ones dead, uttered a cry of distress and hastened away to seek her lord. In a short time both returned, and, sitting upon the edge of the nest, with disconsolate looks, commenced stirring the lifeless bodies as if to satisfy themselves that they were really dead, while a suppressed sad wailing, strangely contrasting with their usual happy chatterings, escaped their breasts.

"Suddenly rising into the air, I saw them descend with relentless fury upon the murderer. My eyes alone had witnessed the bloody deed. They, however, guessed the truth. A dreadful struggle now commenced. The powerful bills were used as piercing spears and cutting swords; the long stiltlegs as clutching claws and beating war-clubs, while the heavy strokes of the long wings sounded loud and far. The feathers flew in all directions; now the combatants, driven as by a whirlwind, flew through the air; then again they would sink upon the adjacent house-tops, until finally the murderer sought safety in flight, and closely pursued by the enraged parents, they were soon out of sight.

"The sequel is soon told: Never from that hour forth did I see the solitary stork upon the chimney; he must have fallen a guilty sacrifice to the wrath of the injured parents."

Innumerable traditions and legends center in this interesting bird in Germany, in which country he is regarded, by the children at least, as something sacred. He has always been regarded as the herald of spring. A very old tradition, recorded as early as the thirteenth century, states that

the storks only adopt the form of birds when with us; but in the distant countries, whither they wend their way every autumn, he would speak, and then he would betray everybody's secrets, because he hears and sees everything. However, as it is, he



they are human beings, and merely undergo an annual transformation into storks on visiting our northern climes The Swabian peasantry say that if a stork had a tongue

manages to give notice of any special occurrence by chattering with his beak. These birds protect the house from lightning and must therefore never be disturbed. There is a theory in North Germany and Swabia that when a nest is manufactured for the stork, which is occasionally done by putting up an old cartwheel with boughs twined round the spokes, he will testify his gratitude to the owner of the house by throwing down a feather the first year, an egg the second year, and the third year a young stork. Then he recommences with a feather, and so on.

The demeanor of the stork on his first appearance is very important. Should he be chattering, the spectator will break a great deal of crockery during the ensuing twelvemonth; if silent, he will be lazy; if flying, he will be diligent. Thus say the peasants of Hanover and Mecklenburg. In the Altmark, a stork on the wing signifies to a maiden that she will soon enter the bonds of wedlock; but if stationary, she will be asked to act as sponsor. Whoever has money in his pocket on first beholding the stork, will never lack during the year, nor will he suffer from toothache.

The superstition that the stork brings the children is current over all Germany. In Silesia the flight of a stork over a house denotes the speedy arrival of a baby; while in the island of Rügen they say that, unless the stork lay eggs, the house will also be childless, and, as the young storks thrive, so will the children. Nobody dare shoot a stork in Rügen, for then he weeps large tears, and each tear portends a great misfortune. The stork is very particular about domestic peace in the dwelling where he takes up his abode, and strife soon drives him away. Swabian peasants say that when the storks assemble for their winter migration, the males and females all pair off, and should there be an odd one, he or she is pecked to death by the rest. The Westphalians declare that the old storks always throw one of their brood out of the nest if the number be uneven. In Oldenburg there is a curious theory that the autumnal gatherings of the storks are in reality Freemasons' meetings. The pious monk, Cesarius von Heisterback, remarks in an ancient chronicle, that the storks are models of conjugal fidelity; and when a female stork attempts flirtation with any other than her lawful husband, she is brought before a jury of storks, and if found guilty, they hack her to pieces with their long bills.

Many of the country folk in Holland place old cart wheels on the roofs of their houses, so that the storks may build their nests on them. A pair of these birds nesting on a house top is considered lucky. The "arrival of the stork" is as gladly hailed in the countries it visits as the coming of the cuckoo. The general plumage of the white stork is a dirty white, with the exception of the wing covers, which are black. The bird is about 42 inches long, and 86 inches across the wings. The wing measures 25 and the tail 10 inches. The great stretch of wing shows that the stork is well equipped for migratory flights. The storks migrate to Egypt and other countries in Northern Africa in winter, and in spring they return to Europe, etc., in immense flights, when they separate into pairs and commence to nest. The nests are roughly composed of sticks and twigs. The young are hatched out in a month, and are carefully fed and tended by both parents till they can fly and procure food for themselves. Many interesting stories have been told of the love, even unto death, manifested by parent storks for the safety of their helpless young. Cruel tricks, not unknown to our own schoolboys, have occasionally been played on sitting storks, such as substituting hen and goose eggs for the rightful ones. In all these cases tragical results followed the hatching out of the intruded eggs. But we had best let a well known ornithological writer tell a sad story of the same kind. "A pair of storks built a nest on one of the chimneys of a gentleman residing near Berlin, the

capital of Germany. Having a curiosity to inspect the nest, the owner climbed up and found in it one egg, which, being about the size of a goose's egg, was replaced by one belonging to that bird. The storks seemed not to notice the exchange: but no sooner was the egg hatched than the male bird, perceiving the difference, rose from the nest, and, flying round it several times with loud screams, disappeared, and was not seen again for three days, during which time the female continued to tend her offspring as usual. Early on the fourth morning, however, the inmates of the house were disturbed by loud and discordant cries, when they perceived about 500 storks assembled in a dense body, and one standing about 20 yards from the rest, haranguing his companions, who stood listening, to all appearance, with great emotion. When this bird had concluded, it retired, and another took its place and seemed to address them in

a similar manner. This proceeding was repeated by several successive birds, until about 11 o'clock in the forenoon, when the whole flock simultaneously rose in the air. uttering dismal cries. The female all this time was observed to remain on her nest. watching their motions with apparent trepidation. In a short time the body of storks made toward her headed by one bird supposed to be the male, who struck her vehemently three or four times, and knocked her out of the nest; the whole mass then followed the attack, until they had not only destroyed the female stork (who made no attempt to escape or defend herself), but the young gosling also, and utterly removed every vestige of the nest itself. Since that time, now many years ago, no stork has been known to build, or even has been seen in the neighborhood." The preserved remains of the poor stork and gosling are now in the house wherethis remarkable occurrence took place.

J. J. Sprenger.



TERY few men have their powers of observation trained in more than one direction. Even those who live in the wilds, keen-eyed though they are and quick to detect whatever is of interest in the particular calling which they follow, miss a great deal of what goes on about them. The practiced hunter is ever on the watch for game, but he does not see the fossils in the rocks over which he follows his prev. The packer is intent on his animals and their loads, and notices at once the bad places in the trail over which he has to pass, but he does not see the game unless it is immediately before him. The trapper has his eye always on the ground or the water looking for beaver sign, and is blind to almost everything else. The senses of each one of these have been developed in one particular direction. He has become in a sense a specialist.

The man who goes into the mountains for the first time sees but a small portion of what goes on about him, and a long training is required before he learns to use his eyes. It is not unusual to hear those who are new to the plains and mountains remark upon the absence of life in these uninhabited regions. The silence of the forest depresses them, and they miss the bird songs, which are such a feature of our Eastern country life in summer. This only means that they do not know how and where to look for the birds and the mammals. They are there. Even in the narrow valley where the Rock Climbers were camped, walled in as it is with mountains whose ribs of rock are bound together by bands of everlasting ice, and whose summits are white with perpetual snow, there were birds, and beautiful ones, and some of them came close about camp.

The day after the ascent of the glacier, Jack and Appekunny, starting at daylight with their saddles and bridles on their backs, crossed the head of the lake, caught two horses, and went up stream to climb the mountain and bring down the meat of the sheep. They tried to pass around the north side of the lake just below the glacier, but the way was so rough and rocky that they were obliged to abandon their horses and to perform half the journey on foot. Reaching the base of the precipice, they climbed it and reached the place where the sheep lay. They then, with great labor, brought it to the summit of the cliff, and lowering it down from shelf to shelf by means of ropes which they had provided, at length got it to the lake shore, and then carried it on their backs to the horses, which packed it into camp. It was a long and hard day's work, however, and when they reached camp that night they were thoroughly exhausted.

Yo, whose note book was somewhat behindhand, and who wished to bring it up to date, determined to remain in camp, and after finishing his task, to search with his glass for the huge male goat seen two or three days before, and if it could be discovered, to climb the mountain and try to secure it. He wrote for several hours, and then taking his glass and rifle and going out to the edge of the snowslide, swept the mountain long and carefully, but was unable to find a single goat. Somewhat discouraged, he returned to the fire and resumed his writing.

There was a good deal that was delightful in his solitary day, even though nothing very exciting happened and no blood at all was spilled. The forest, which to the casual traveler seems so silent and so destitute of life, was not without its sounds and its inhabitants, who made themselves very much at home about camp. Early in the morning a friendly little water ouzel came

feeding along the shore, and after he had finished his breakfast perched himself on a drift stick which ran out into the water, and sat there for hours practicing the thrush-like song with which next spring he was to charm his mate and lighten her labors all through the long summer days. He was a young bird, but his song, though low, was sweetly musical. And he tried it over and over again, stopping whenever he made a mistake and beginning anew, with a patience and a perseverance that was most admirable. He seemed a very humble bit of life as he stood there clad in Quaker gray, and hardly to be distinguished from the stones of the beach about him; but no one could help admiring the little fellow, or being delighted by the liquid notes, which the surrounding silence made only more sweet.

On one of the trees hung the shoulders of the sheep, and these, shining red against the dark green, soon attracted the notice of a vagrant family of gray jays which, like a troop of devil-may-care marauders, were skylarking among the pines. What amusing rascals these meat-hawks are. They are incomparably impudent, and their daring compels your admiration. If they happened to care for it they would have no hesitation in trying to steal the nose off your face. Perhaps they could succeed in doing it, who knows. At all events they would make a bold effort for it. To use an expressive Western phrase "they would steal the cross of a mule "-if they took a fancy to it. A gray jay has no hesitation in alighting within three feet of your face and winking at you in a rakish rollicking way as much as to say, "Don't you wish you could catch me?" He will stand on the legs of a deer which is hanging in a tree while you are skinning it, and will dart down to the ground after every little bit of meat or fat that drops from your knife. Sometimes two or three will stand about your feet, almost like hens about a person who is feeding them. You can entice them almost up to your hand by judiciously tossing bits of meat to them, making each one fall a little nearer you than the last.

And yet they understand very well how to take care of themselves, do the gray jays. Talk about catching a weasel asleep, why a weasel is a fool to a gray jay! They watch you suspiciously with their keen black eyes, always on the alert, ever ready to take flight to avoid a snare. Treat them as generously as you please, they will not trust you. They have borrowed their motto from the Mantuan bard, and each one of them lives up to it most religiously, and thinks, if he does not say, Timeo Danaos, et dona ferentes. Still they plunge down on to your meat or close to your fire with an audacious flirt, which makes you feel that the camp really belongs to them and that you are only an intruder and ought, if you have any modesty about you at all, to withdraw and take yourself off into the timber. Then there is a flirt of wings and tail, a sort of experimental trial of the limbs to see that they are in good working order in case they should be suddenly called on to use them. The next thing is to raise themselves to full height as if standing on tiptoe to get a good look on all sides. A couple of hops bring them to the coveted morsel. If it is not too large they carry it off bodily to a neighboring branch, and then holding it under one foot, hammer and tear it until it is so divided that it can be swallowed, but if it is a large piece of meat they tear off bits and strips until they have a good beakful, and then fly to a safe distance to eat it, returning almost immediately for more. They sometimes cling and hang to a piece of meat like titmice, upside down. Usually only one will be present at a time, and the moment he leaves his position another takes his place. If two should alight together, the younger almost immediately retires, for the other holds himself very

straight indeed, slightly erects the feathers of his head and utters a low flute-like whistle, which seems to be a note of warning, and is almost always respected. They are not satisfied with taking what they want to eat, not at all. After they have satisfied their appetites, they continue to come and plunder, carying off their booty and laying up in secret storehouses that they have far up above the earth, where it will be safe from the depredations of any but feathered thieves. More on this point will be told elsewhere.

But though the gray jays do not fear mortal man, there is one of their own kinsfolk that they hold in high respect, and for whom they at once make way. As Yo sat there with his back against a tree and with his open book on his knee lazily watching the robber brood, a dark shape flashed across an opening in the spruces and a moment later a superb Steller's jay alighted in a small tree which overlooked the camp, erected his long crest, looked about him for an instant, and then hopping from one branch to another, ascended to the topmost spray, where he hung for an instant, swinging backward and forward on the slender twig. Then he darted down and lit upon the meat, and after another glace around him, to see that all was safe, attacked it vigorously, sinking his sharp bill into the tender flesh at every stroke. He was a fine fellow, beautiful in color and shape, with dark blue wings and tail and a smoky-brown body and head, a long crest and light blue dots on his forehead; trim, graceful, alert and quick in all his motions. He remained but a litte while about the camp, and then dashed away into the forest. Perhaps there was something about the motionless figure that sat within five or six feet of him, that aroused his suspicions, or perhaps he was merely too restless to stay long in one place, and having taken a bite or two, felt he must make explorations in some other direction. At all events he went, and the camp saw him no more at that time, though later in the day he or another of his family returned, took a few bites of the meat and then hurried off as if called by pressing business. The gray jays came back again when the coast was clear, and so persistently did they attack the meat, that Yo finally drove them off and threw a coat over it to protect it.

There were other birds about the camp, and the jays, though the most conspicuous by their size and their boldness, could not monopolize the attention of the watcher. The modest little juncos, birds like the black snowbird of the East, now and then crept out of the forest, and advancing by cautious hops to the neighborhood of the fire, feasted on the bread crumbs that had been dropped on the ground. Feasted and almost fought, for, though they seem the most timid and shrinking little creatures you can imagine, they have a spirit of their own, and when one had found a choice bit of bread, and was picking it to pieces, he allowed no one of his companions to come very near to him. An approach was promptly met by a threatened attack, and the claimant of the bread, with grimly lowered head and bristling feathers, prepared to defend his rights. They never quite came to blows, though once or twice war seemed imminent, for the individual threatened declined to be bullied, and promptly threw himself into a defensive position; but after eyeing each other fiercely for a few seconds one or the other would take a little hop to one side, and then the other would move off, and presently the ruffled feathers would be smoothed down and peace would once more resume her sway.

Sometimes, from far back in the wood, there would be heard dull tappings and drummings, which told that the carpenters among birds were about, and after a while one of these dashed into camp, and alighting near the top of an old dead stub, stood there for a while as if waiting to be admired. He was handsome enough to be looked at, with his glossy black back relieved by white shoulder knots and his satin-bound cap of red. A jolly fellow, as energetic as could be while at work, but with a liking for frequent intervals of rest. He would hammer away at the wood as if his life depended on it, making the chips fly this way and that, but when he had secured the grub that his keen ear told him was concealed there, and had swallowed it, he would sit quite still for some moments as if meditating on its excellent flavor. sudden movement of the gray jays, which still loitered about in the hope of being able to steal something more, would sometimes alarm this gentleman, and cause him to dodge round to the other side of the stub with a little shriek of alarm, but he would at once peer out from behind it again, and finding that his fears were groundless, would go to work again.

Two rather distant cousins of his also made their appearance. Banded three-toed woodpeckers they were, somewhat more modestly clad in black and white, with yellow silken caps. They worked more on the trunks of the higher trees and their larger limbs, corkscrewing about them and pecking away in a modest fashion as if anxious to escape observation. One of them ensconced himself in a hollow in the back of a great spruce, and staid there for a long time, taking a siesta, it was conjectured, before starting out for his evening meal.

Once in a while there would be heard far back in the forest a tremendous row shouts of fury, screams of passion and volleys of oaths and bad language, as if two ruffians had had a falling out and were abusing each other with all their might, but the listener was not greatly disturbed, for he knew that the racket only indicated that something had occurred to ruffle the temper—always somewhat uncertain—of a little pine squirrel, who was now railing against fate with all the power of his small lungs.

The day passed thus in a quiet fashion, and Yo sat about the camp and welcomed the visitors that came to it. Once or twice he went out to the snowslide and looked at the mountains, but the great goat whose head and hide he longed for could not be seen. It was not worth while to climb the hills to kill another small one, for they already had quite as much meat as they were likely to use for some time, and the mere killing of an animal is not sport.

On one of his walks to the snowslide he met two Franklin's grouse, pretty dainty little birds quite ignorant of fear. He looked at them and they looked at him for some time, and at length one of them flew up into the low branches of a spruce and ruffling up its feathers and cuddling down, seemed disposed to take a nap. Yo was tempted to try whether it would not be possible to accomplish with this bird what he had seen done in Canada with its close relative the spruce grouse. Those birds are so gentle and unsuspicious that they may be caught by means of a noose tied to the end of a pole eight or ten feet long. The noose is slipped over the bird's head as it sits on a limb and it is dragged from its perch to its captor's hand. He even got out a bit of twine from his pocket, made a loop in it and looked about for a pole, but before he had completed his preparations he thought better of it, and gave over the attempt. There was really so much that was appealing in the perfect trust and innocence of the little creature that sat sleepily there above him, that he had not the heart to disturb it, much less to compass its destruction.

"Yo," in Forest and Stream.

THE AUDUBON NOTE BOOK.

MEMBERSHIP RETURNS.

THE registered membership of the Society on October 1st was 47,841, showing an increase of 197 for the past month, drawn from the following sources:

New York	96	Ohio	12
Massachusetts	31	Illinois	I
New Jersey	2	Michigan	5
New Hampshire	8	Minnesota	I
Vermont	1	West Virginia	21
Rhode Island	3	Maryland	4
Connecticut	1	Ontario	I
Pennsylvania	10	-	_
			197

C. F. AMERY, General Secretary.

AN INTELLIGENT CROW.

A FAMILY named Tennant, living at Hebron, Conn., have a tame crow, which they think would be hard to beat. He takes a very lively interest in all the farming operations, seeming to regard the running of the mowing-machine as requiring his especial supervision. Whenever he hears the whirr of the machine he will immediately fly in the direction of the sound, and perch on the backs of the team or on the machine. When a stop is made for oiling he becomes very curious, sticks his inquisitive head down and takes the spout in his bill. In his flying trip he is greatly annoyed by kingbirds, who will swoop down upon him and peck him. When these annoyances become unbearable, Jocko, as he is called, flies directly to the nearest human friend and perches upon his shoulder, knowing that he is then safe from his tormentors. He has a very peculiar habit of investigating the interior of your ear with his bill when perched upon your shoulder. It is needless to say that the children of the family are greatly attached to him. - Hartford Daily Courant.

A WAYWARD PET ROBIN.

Another pet bird with pretty ways went astray this week, and this time it was a fat little robin with a bright crimson breast and eyes like beads. The little fellow was so fat and plump that he had been christened Bunch. It seems that Bunch, who was the pet bird of Mrs. W. P. Hurd of 43 West Thirtyninth street, had a way of following his mistress about from room to room, perching, as it best pleased him, on her head or shoulder. Tuesday morning he saw Mrs. Hurd go into the back yard, and he surveyed things with very curious eyes. He perched on the fence and looked at the back of St.

Ignatius's sanctuary. Mrs. Hurd tried to coax him into his cage, but he took wing for one of the sanctuary's windows. Here mysterious sounds from the organ startled him and he flew to the roof of an adjacent house. Mrs. Hurd went to the roof of the house and called him. Bunch cocked his head first on one side, then on the other, and finally flew over to the chimney of a neighbor's house. The chimney was hotter than anything Bunch had ever remembered standing on, so he gave a couple of shrill whistles, gathered himself, and flew in terror toward Sixth avenue, since which time he has not been seen by his owner.

Bunch had been a pet for the last year, and had many ways that made him dear to his owner. His chief delight was to light on the back of Pippo, a hairless Mexican dog, and keep a firm footing in spite of the efforts of Pippo to shake him off. Another favorite trick of the bird was to pick up and carry to his cage spools, needles, and even thimbles. He was a very clever bird, a good companion, and an excellent whistler, and his loss is sincerely regretted.

BIRD STRATEGY.

A COUPLE of robins recently came to an amicable understanding, and built a nest in the fork of a low bough on a pine tree growing near the railroad station at Fair View, N. J. It was almost completed on Sunday, and, going to their new home, with the last few twigs requisite, rather for an ornate finishing than for anything else, the birds were mortified to find a large, green, ugly toad filling the nest, and hopping over the edges. Whether a toad can climb a tree or not is an unsettled question, and did not seem to interest the birds. He was there, and that was quite enough for them. Several hours were passed in strenuously trying to eject him, the birds working in a systematic manner, and, by using their combined forces at one side of the nest, endeavoring to heave the intruder out at the other. They were not strong enough, however, and they could not raise the gross body. The toad seemed to be asleep, and, as he lay with closed eyes, the respiratory heaving of his fat sides alone showing that he was not dead, neither pecking nor pushing seemed to have the slightest effect on him. Weary and discouraged, the robins flew to an adjacent bush, and, apparently, discussed the situation.

When they returned to the attack ten minutes later they had perfected a plan that made short work

of the toad. They began with great earnestness to tear away the bottom of the nest, and in a very short time the obnoxious thing came tumbling through the hole. He roused himself, and, with a hoarse, protesting croak, hopped into the long grass. Then the robins flew away to build another house. They had ousted the toad, but they had no intention of reconstructing their desecrated nest.

THE LOON IN CAPTIVITY.

ABOUT a week since a loon was caught in a net in the St. John River, a few miles above Fredericton, by a man who was engaged in drifting by night for shad and salmon. The bird was freed from the net and brought to Fredericton, where it was purchased by Mr. Wilmot Guion. This loon, which has a green ring around his neck, and whose black back is spotted largely with white, probably does not weigh over ten pounds. When first caught, and for some time after, he was very cross, and threatened with his long, sharp bill those who came near him, striking viciously at them with it. In front of the City Hall at Fredericton stands a fountain, the basin of which has a clear diameter of fourteen feet, exclusive of the pedestal in the center; in this the loon was placed. The water falls into the basin from a series of small jets, and he is very fond of taking up his position under the dropping spray. Since he has been placed in this basin he has become very tame and allows himself to be handled and caressed in the most confiding manner. He likes to have the back of his head and neck scratched by the visitor's hand. When there is a crowd looking at him he comes to the side of the basin where they are. He seems not to care about being in the water for more than an hour at a time; then he wants to be taken out and placed upon the grass; when he is anxious to be removed from the water he utters a low cry and readily allows himself to be removed, coming, indeed, up to the person who is ready to do him this kind turn. As soon as he is out of the basin he begins pluming his feathers.

After having been out of the water for a length of time he is frantic when he is returned to it. The other day, when replaced, he went three times around the basin without ever coming to the surface. He is very voracious, and yet dainty, as he will eat chub only when just freshly killed, if at all stale he at once rejects them. A few days ago three small chub swimming around in a pail of water were brought to him; he drew himself up, his eyes all the while glittering as he looked at his finny food, and uttering a low note, somewhat similar to that of the wild goose, just as the fish were being poured out into the basin he caught one before it reached

the surface of the pond. The other two went, one to the right, the other to the left; that which headed to the right got but the loon's own length before he was caught, that to the left got no further than six feet before he shared a similar fate.

Last evening an eel eighteen inches long was put into the basin, and this, having concealed itself, the loon failed to catch it. This morning, however, while he was diving he brought the eel up, which twisted itself all around his neck, but he held it tightly in his bill, moving it slowly around until he got to its head; he then succeeded in swallowing, head first, about half of its length without difficulty, but was seven or eight minutes getting the rest of it down, the tail meanwhile twisting about his bill in a most singular manner. At the time the loon was put in the basin there was a sturgeon about eighteen inches long in it; this has disappeared and it is presumed that the bird has made away with it. When not otherwise engaged the loon occupies its time in snapping at the flies which hover around the edge of the basin or surface of the water. - Edward Jack in Forest and Stream.

ALBINO BOBOLINK.

Editor Audubon Magazine:

SQUARETOP, Wyoming Co., Pa., August 15.—To-day I saw a large flock of female bobolinks (or perhaps male also in their winter plumage), and with them one perfect albino, and it was the most beautiful creature flitting about, and to me it appeared to be embodied happiness. I never saw anything that suggested a happy creature more than that pure white bird. It was not persecuted by the others, as I have read they sometimes are, but seemed to be an honored member of the flock, a sort of princess among them with a lady in waiting always near.

How I longed to keep it always near, although I would not have made it a captive for the world! and what a pang went through me as I thought that the same longing for possession would animate others, who would shoot it recklessly to gratify the craving.

MAY A. WALTER.

WE are indebted to the courtesy of Dr. C. Hart Merriam of the special branch of the Agricultural Department at Washington, for his report on economic ornithology for 1887, but our notice of it has been crowded out of the present number.

WHO SENT THE MONEY?—On Sept. 2 we received a letter from Atlanta, Georgia, containing postage stamps to the value of thirty-four cents, but no line to indicate who sent it, or the purpose for which it was sent.

EMINENT PEOPLE ON BIRD PROTECTION.

OAK KNOLL, Danvers, Mass., and mo., 20, 1886.

Editor Forest and Stream:

I heartily approve of the proposed Audubon Society. We are in a way to destroy both our forests and our birds. A society for the preservation of the latter has long been needed, and I hope it is not too late for the accomplishment of its objects.

I could almost wish that the shooters of the birds, the taxidermists who prepare their skins, and the fashionable wearers of their feathers might share the penalty which was visited upon the Ancient Mariner who shot the Albatross. Thy friend,

JOHN G. WHITTIER.

BROOKLYN, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I am heartily in sympathy with your purposes for the protection of birds, and should be glad to contribute any influence that I can to that end.

If there were no purchasers there would be no demand, and no reason for slaughtering these winged gems. But as only women create a demand, it rests upon them to stay this wanton destruction. I am sure that it is only necessary to bring before American women the cruelty of this "slaughter of the innocents" that fashion is carrying on, to secure a renunciation of this ornament and the salvation of birds.

On this subject the kind feelings, the taste, and esthetic sympathy of the whole community are on your side, and if you persevere you will surely win.

HENRY WARD BEECHER.

CORNWALL-ON-HUDSON, N. Y., Feb. 22, 1886.

Editor Forest and Stream:

You have indeed my hearty sympathy in every effort to prevent the slaughter of my innocent little neighbors and friends, the birds. In the destruction of forests and birds, the people of this land are inviting very great evils and inflicting wrongs on posterity which scarcely can be measured. The press should render it impossibe for women to sin thoughtlessly and ignorantly in demanding little birds for their adornment. The evil should be brought home so fully to the knowledge of all, that the continued wearing of our useful little birds should become the badge and indication of a callous, vulgar nature. You are doing a humane and patriotic work in exciting public aversion to one of the most cruel and stupid wrongs of the age.

Respectfully yours,
EDWARD P. ROE.

West Park, N. Y., Feb. 20, 1886. Editor Forest and Stream:

I scarcely need assure you that your undertaking to form a society for the protection of our wild birds against the ravages of the milliners and the sham scientific collectors has my warmest sympathy and approval. It is a barbarous taste which prompts our women and girls to appear upon the street with their head gear adorned with the scalps of our songsters; and it is mere vanity and affectation which prompts so many persons to make up cabinets of the nests and eggs of the same. The destruction of our birds from their natural enemies is immense, and this craze of the collectors, and folly of the milliners and their customers in addition, threatens their serious diminution.

I hope you may succeed in creating so strong a public sentiment upon the subject that the collectors of skins and eggs for the unworthy purposes of fashion or to indulge the vanity of pseudo-naturalists may suddenly find their occupation gone.

Please add my name to the list of the members of the AUDUBON SOCIETY. Very sincerely,

JOHN BURROUGHS.

160 W. 59TH STREET, NEW YORK, Feb. 20, 1886.

Editor Forest and Stream:

No one who will take the trouble to give the matter a few moments' serious consideration can be in doubt, I think, as to the wisdom of organizing the AUDUBON SOCIETY, and I am thankful that such a step is contemplated. There is an element of savagery in the use of birds for personal decoration, which is in grotesque contrast with our boasts of civilization. But even the savage stops short, as a rule, with the feathers. It is only Christian people who think it worth while to butcher a whole bird to adorn their head gear. I am sure, however, that this is largely from that unreflecting habit which is a leading vice in people who follow the fashions. But it is a vice; as Hood sang, when he wrote—

For evil is wrought
By want of thought
As well as by want of heart.

If the Audubon Society can teach men, and especially women, to think on this subject, half of the battle will have been won. Henry C. Potter.

ANDOVER, Mass., Feb. 21, 1886.

Editor Forest and Stream:

I am in earnest and indignant sympathy with the motive of any society organized to prevent the murder of birds for decorative purposes.

E. S. PHELPS.





THE TUFTED TITMOUSE.

(Parus bicolor (LINN.))

THE AUDUBON MAGAZINE.

VOL. II.

DECEMBER, 1888.

No. 11.

THE TUFTED TITMOUSE.

THE Titmice, to which family this species belongs, are all small birds, bearing a curious resemblance in all external points of structure to the jay. Like them they have a short, strong, straight, conical bill, rounded nostrils at its base, covered by tufts of thick, forward directed bristly feathers. As in the jays, the wings have ten feathers on the first joint and are shorter than the tail. Their feet, too, are much like those of the jays, and, so far as their looks go, there is little to distinguish them from the group, except their size. All our Titmice are under seven inches long, while all our jays are much larger than this.

The Titmice are distributed over the whole of North America; those found in the East and North are without crests and for the most part have the top of the head black or sooty brown. The Tufted Titmice are rather Southern birds and all but the subject of the present sketch are found in the Southwest. Mr. Sennett has recently described some new species from Texas.

Many of our Titmice are hardy birds, remaining with us through the winter, and seeming to endure without trouble the coldest weather of Canada and New England. They are all active, sprightly birds, plain in color, but with pleasing vivacious ways, and a neat, trim appearance. Nuttall sums up their characters in the following language. He says: "These are familiar,

active, restless birds of a peevish and courageous disposition, and great enemies to insects. They move by short, sudden leaps and flights from branch to branch, suspending themselves readily in all attitudes. They live in families, in woods or marshes, and approach gardens and orchards in autumn and winter. They are strictly omnivorous, feeding on grain, fruits, insects and larvæ, which they dislodge from every retreat, and in this pursuit sometimes injure in some degree the buds of trees. They perforate seed vessels, hard seeds, and even nuts and almonds, to obtain their contents; they likewise feed on flesh, and are fond of fat. Sometimes they carry their depredations so far as to pursue and attack sickly birds, even of their own species, commencing like jays by piercing the skull and devouring the brain. They are of a quarrelsome disposition, and often attack larger birds, killing the weaker, and are very resolute in defense of their young. They breed once a year, lay many eggs, in some species 18 or 20. Their voice is commonly unpleasant, and their chatter monotonous. Their flesh is scarcely better than that of the rook and crow. They are readily tamed, and may be fed with cheese, nuts, and oily seeds."

To our mind this account of the Tits is hardly fair to them. They are, we think, very attractive little birds, and, being seen at a time when bird life is scarce in our orchards and forests, form a delightful feature of the bleak winter landscape. We have never observed in them any of the traits of ferocity noted by Nuttall, and it is certain that they associate in perfect amity with other birds of similar habits, such as the nuthatches and kinglets. We regard their voices as cheerful and merry if not always musical. Moreover, they seem to have little fear of man, and if not companionable are at least familiar little birds.

The Tufted Titmouse is a bird of rather Southern distribution, and on the Atlantic coast is not commonly found much north of New Jersey. The earlier writers reported this bird as having a much more northern distribution, and even as being found in Greenland, but this is now known to be erroneous. Specimens have been taken in New York and Connecticut, but they are quite unusual here and can only be regarded as accidental. This Titmouse breeds in the Southern States and as far north as New Jersey, and it is quite possible that we may sometimes learn of its nesting in New England.

It digs a hole in the tree much after the manner of the woodpeckers, but instead of being content to deposit its eggs on the fine chips at the bottom, it makes a warm nest by filling the hole with various soft materials on which the eggs are deposited. These are from six to eight in number, pure white except for a circle of brown dots about the larger end. In New Jersey the eggs are laid toward the end of May, but further south the nesting time is somewhat earlier. As soon as the young are able to leave the nest they follow the parents, and, Audubon says, continue with them until the following spring.

The food of the Tufted Titmouse consists chiefly of insects and their eggs and larvæ. In spring and summer he chases flying insects and captures them very adroitly, but during the greater part of the year his time is spent going over the trunks

and branches of trees, peering into each crack and cranny of the bark, in search of the hidden stores of insect food which are to be found in such situations. In the autumn this bird also feeds upon the seeds of weeds and on soft nuts. Like the jays the Titmice are accustomed, when they secure any bit of food that is too large to be readilv swallowed, to hold it under the foot, and hammer at it with the bill until it is broken into pieces small enough to be devoured. In this way it breaks up the larger hard seeds, acorns and other nuts. which Wilson had in confinement was fed on hemp seed, cherry stones, apple seeds and hickory nuts, which were broken up and placed in its cage. This bird, though at first restless and making its way out of its wicker cage by repeated blows of its strong bill against the wood, soon became familiar in confinement.

The Tufted Titmouse is more musical than most of its kind. Nuttall compares its more common call or whistle to the clear ringing notes of the Baltimore oriole, and devotes a good deal of space to attempts to convey an idea of its various notes by syllables, but, as might be imagined, these efforts at reproduction are not very successful. Any attempt to reproduce musical sounds by other sounds which have in them no music at all must necessarily fail. The most that can be done by this method is to convey an impression of the relative times which the different notes bear to one another. Some different system of notation must be devised before our birds' songs can be reproduced so as to give any just notion of them to one who is unfamiliar with them. No one understood this better than Nuttall.

The flight of the Tufted Titmouse is short and hurried, and its rounded concave wings make a perceptible noise as it passes one. It is much more at home in the branches of a tree, where like all the other Titmice it assumes all imaginable at-

titudes. Some one has spoken of the nuthatches as the harlequins among birds, and the figure is a happy one, but we are inclined to think it almost as applicable to the Titmice. They are much given to swinging head downward on a limb, and will twist themselves around a twig, as readily as an expert gymnast over a horizontal bar.

In winter these birds roost in old woodpecker holes or in crevices in the trees, which afford them some protection from the weather.

The Tufted Titmouse is about 6½ inches long and measures 9 inches across the extended wings. The general color of the upper parts is dark bluish-ash. The forehead is black, sometimes tinged with reddish. The under parts are grayish-white and the sides pale reddish-brown, the iris is brown, the bill black, and the feet lead color.

ALEXANDER WILSON.

VII.

WE left Wilson at the outset of his description of his voyage down the Ohio, and will take up the narrative in his own words, still preserved to us in his letter to Mr. Alexander Lawson:

"I now stripped," he says, "with alacrity to my new avocation. The current went about two and a half miles an hour, and I added about three and a half miles more to the boat's way with my oars. In the course of the day I passed a number of arks, or, as they are usually called, Kentucky boats, loaded with what, it must be acknowledged, are the most valuable commodities of a country, viz., men, women and children, horses and ploughs, flour, millstones, etc. Several of these floating caravans were laden with store goods for the supply of the settlements through which they passed, having a counter erected, shawls, muslins, etc., displayed, and everything ready for transacting business. On approaching a settlement they blow a horn or tin trumpet which announces to the inhabitants their arrival. I boarded many of these arks, and felt much interested at the sight of so many human beings migrating like birds of passage to the luxuriant regions of the South and West. The arks are built in the form of a parallelogram,

being from twelve to fourteen feet wide, and from forty to seventy feet long, covered above, rowed only occasionally by two oars before, and steered by a long and powerful one fixed above. * * *

"I rowed twenty odd miles the first spell, and found I should be able to stand it perfectly well. About an hour after night I put up at a miserable cabin, fiftytwo miles from Pittsburgh, where I slept on what I supposed to be cornstalks or something worse; so preferring the smooth bosom of the Ohio to this brush heap, I got up long before day, and, being under no apprehension of losing my way, I again pushed out into the stream. The landscape on each side lay in one mass of shade; but the grandeur of the projecting headlands and vanishing points, or lines was charmingly reflected in the smooth glassy surface below. I could only discover when I was passing a clearing by the crowing of cocks, and now and then in more solitary places, the big horned owl made a most hideous hollowing that echoed among the mountains. In this lonesome manner, with full leisure for observation and reflection, exposed to hardships all day and hard berths all night, to storms of rain, hail and snow, for it froze severely

almost every night, I persevered from February 24th to Sunday evening March 17th, when I moored my skiff safely in Bear Grass Creek at the rapids of the Ohio after a voyage of seven hundred and twenty miles. My hands suffered the most and it will be some weeks yet before they recover their former feeling and flexibility. It would be the task of a month to detail all the particulars of my numerous excursions in every direction from the river. In Steubenville, Charlestown and Wheeling I found some friends. At Marietta I visited the celebrated remains of Indian fortifications, as they are improperly called, which cover a large space of ground on the banks of the Muskingum. Seventy miles above this at a place called Big Grave Creek I examined some extraordinary remains of the same kind there. The Big Grave is three hundred paces round at the base, seventy feet perpendicular, and the top, which is about fifty feet over, has sunk in, forming a regular concavity three or four feet deep. This tumulus is in the form of a cone, and the whole as well as its immediate neighborhood is covered with a venerable growth of forest four or five hundred years old, which gives it a most singular appearance. In clambering around its steep sides I found a place where a large white oak had been lately blown down, and had torn up the earth to the depth of five or six feet. In this place I commenced digging, and continued to labor for about an hour examining every handful of earth with great care; but except some shreds of earthenware, made of a coarse kind of clay, and considerable pieces of charcoal I found nothing else; but a person of the neighborhood presented me with some beads fashioned out of a kind of white stone which were found by digging on the opposite side of this gigantic mound, where I found the hole still remaining. The whole of an extensive plain a short distance from this, is marked out with squares, oblongs and circles, one of which comprehends several acres. The embankments by which they are distinguished are still two or three feet above the common level of the field. The Big Grave is the property of a Mr. Tomlinson or Tumblestone who lives near, and who would not expend three cents to see the whole sifted before his face. I endeavored to work on his avarice, by representing the probability that it might contain valuable matters, and suggested to him a mode by which a passage might be cut into it level with the bottom, and by excavation and arching, a most noble cellar might be formed for keeping his turnips and potatoes. 'All the turnips and potatoes I should raise this dozen years,' said he, 'would not pay the expense!' This man is no antiquary or theoretical farmer, nor much of a practical one either I fear; he has about two thousand acres of the best land and just makes out to live. * * *

"On Monday, March 5th, about ten miles below the mouth of the Great Scotin, where I saw the first flock of parroquets. I encountered a violent storm of wind and rain, which changed to hail and snow, blowing down trees and limbs in all directions, so that, for immediate preservation, I was obliged to steer out into the river which rolled and foamed like a sea, and filled my boat nearly half full of water, and it was with the greatest difficulty I could make the least headway. It continued to snow violently until dusk, when I at length made good my landing, at a place on 'the Kentucky shore, where I had perceived a cabin, and here I spent an evening in learning the art and mystery of bear-treeing, wolf-trapping and wildcat-hunting from an old professor. But notwithstanding the skill of this great master, the country here is swarming with wolves, and wildcats, black and brown. According to this hunter's own confession, he had lost sixty pigs from Christmas last, and all night long the distant howling of the wolves kept the dogs in a perpetual uproar of barking. This man was one of those people called squatters, who neither pay rent nor own land, but keep roving on the frontiers, advancing as the tide of civilization approaches. They are the immediate successors of the savages, and far below them in good sense and good manners as well as comfortable accommodations. * *

"In the afternoon of the 15th I entered Big Bone Creek, which, passable only about a quarter of mile, I secured my boat, and left my baggage under the care of a decent family near and set out on foot five miles through the woods for the Big Bone Lick, that great antediluvian rendezvous of the American elephants. This place, which lies 'far in the windings of a sheltered vale,' afforded me a fund of amusement in shooting ducks and parroquets (of which last I skinned twelve, and brought off two slightly wounded), and in examining the ancient buffalo roads to this great licking place.

"McColquhoun, the proprietor, was not at home, but his agent and manager entertained me as well as he was able, and was much amused with my enthusiasm. place is a low valley everywhere surrounded by high hills; in the center, by the side of the creek, is a quagmire of near an acre, from which, and another small one below, the chief part of these large bones have been taken; at the latter place I found numerous fragments of large bone, lying scattered about. In pursuing a wounded duck across this quagmire, I had nearly deposited my carcass among the grand congregation of mammals below, having sunk up to the middle, and had hard struggling to get * * out. *

"A number of turkeys which I observed from time to time on the Indiana shore made me lose half the morning in search of them. On the Kentucky shore I was also decoyed by the same temptations, but never could approach near enough to shoot

one of them. These affairs detained me so, that I was dubious whether I should be able to reach Louisville that night. Night came on and I could hear nothing of the falls. About night I heard the first roaring of the rapids, and as it increased I was every moment in hopes of seeing the lights of Louisville; but no lights appeared and the noise seemed now within less than half a mile of me. Seriously alarmed lest I might be drawn into the suction of the falls I cautiously coasted along shore which was full of snags and sawyers, and at length with great satisfaction opened Bear Grass Creek, when I secured my skiff to a Kentucky boat, and loading myself with my baggage, I groped my way through a swamp up to the town. The next day I sold my skiff for exactly half what it cost me; and the man who bought it wondered why I gave it such a droll Indian name (The Ornithologist). 'Some old chief or warrior I suppose?' said he."

Wilson examined the falls by daylight and found them by no means so formidable as he had imagined, he saw two arks and a barge shoot them with ease, and felt quite confident of his own ability to negotiate them with his skiff. He describes the country around Louisville as swampy and unhealthy, with every facility for draining the swamps, redeeming their fertile soil, and rendering the location as healthy as any on the river.

From Louisville he set out on foot for Lexington, seventy-two miles distant, and saw very little to commend. The soil, he says, is of the richest, but the log houses are described as of the meanest, and a general air of slovenliness characterizes the homestead and its surroundings. Want of bridges was in those days a serious inconvenience to the foot traveler, and Wilson tells us that between Shelbyville and Frankfort, having gone out of his way to see a pigeon roost, he waded a deep creek called Benson nine or ten times.

In a later letter to Mr. Alexander Lawson, written from Nashville, he refers more particularly to one of these pigeon roosts, or breeding places which, he says, continued for three miles, and from information exceeded in length more than forty miles. "The timbers," he says, "were chiefly beech—every tree loaded with nests, and I counted in different places more than ninety nests in a single tree."

From Nashville Wilson traveled through the wilderness on horseback to Natchez, Mississippi Territory, safely overcoming every obstacle, but undergoing very severe exposure, and in June he reached New Orleans and sailed thence to New York, and again entered Philadelphia after a long and arduous but fairly successful journey, during which he experienced many difficulties from the season and climate, the wildness of the paths and from a sickness which nearly proved fatal, but which his good constitution, and the simple prescription of an Indian bore him safely through. He nevertheless procured much information and new materials for his work, besides keeping up an extensive correspondence with his friends, and regularly entering in a diary the events of each day. From this diary, and the corresponding account of Audubon, we learn that these ornithologists first met at Louisville, and have to regret, says his biographer, that their intimacy and acquaintance had not a longer existence. Before this meeting neither seemed to have had any idea of the other's existence, though both were eagerly

pursuing the same object, but in spite of the kindred nature of their pursuits their natures were too diverse for the existence of any bonds of sympathy. Audubon had already at that time a better collection of birds than Wilson, his drawings were better, and yet he was to all appearance a well-to-do storekeeper pursuing ornithology only as an amateur for the diversion of his leisure, admitting that he had never thought of publishing the results of his labors. He received Wilson with easy but indifferent courtesy and politeness, and made himself helpful to him in small ways, but he neither felt nor made any display of enthusiasm, and Wilson's sensitive nature appears to have been wounded to the quick, while on Audubon his visit appears to have made but little impression.

The following entries in Wilson's diary of his avocations in Louisville display a measure of reserve, which serves to indicate the feelings they were intended to draw a veil over:

"March 19th. Rambling round the town with my gun. Examined Mr. ——'s drawings in crayon—very good. Saw two new birds he had—both *Motacillæ*.

"March 20th. Set out this afternoon with the gun; killed nothing new. People in taverns here devour their meals. Many shopkeepers board in taverns—also boatmen, land speculators, merchants, etc. No naturalist to keep me company. And apparently getting no subscriptions in Louisville he closes with the bitter remark, "Science and literature has not a friend in this place."

THE WOUNDED REDSTART.

THERE are certain days in every season of the year so exceedingly beautiful that we feel it is a sin to stay in the house, and to ignore the wind and the sunshine, and the perfume of flowers where they come laughing in at the windows to

us as it were seems like giving the cold shoulder to our best friends.

One of these perfect days occurred in the latter part of August, so I put on my things and prepared to sally forth.

As I passed out of the house my atten-

tion was attracted by a little bird which ran before me down the pathway, occasionally looking back to see if I were following, I thought, and making a note or call which I can only compare to the sound of a kiss.

I saw at a glance it was not one of my sparrow friends by the yellow tail, but I could not approach close enough to note the less clearly defined peculiarities of plumage, and by this time the little sprite had neared a tree which he would fly into, of course, and be lost to view.

To my surprise, however, he did not fly into the tree, but darted behind it instead. This was such an unbirdlike proceeding that I hastened forward to see what was the matter, and soon found the object of my search in the long grass, where I easily secured him.

Such a minute body! and, oh! sad to relate, a broken wing, probably the work of a stone, or bean snapper, in the hands of some heartless boy.

Poor little victim, standing helpless in the pathway, deprived of his only means of escape from his many enemies! I understood now the pretty timid devices to attract my attention, and conciliate my good will.

How glad I was I had not delayed coming out just to do this, or to finish that! And before the cat next door had made her matutinal exploration of that identical long grass.

"But you're safe now, my birdie!" I cried, "so calm your fluttering little breast," and I really think that the feeling of my hands round the little fellow gave him a sense of security, for he made no effort to escape, and looked up at me most confidingly.

As I hastened back to the house, I encountered my sister, who had promised to overtake me in my walk.

"I've got a wounded bird," I exclaimed, "run, and get something to put it into," and by the time I had reached my room, a

basket with some soft clothes laid in the bottom was ready to receive the little sufferer. Not knowing what food to feed him, I scattered some rape seed in the basket, and tied a piece of coarse white net over the top. Then I darkened the room, and set out again to resume my walk.

As soon as I returned I hurried up-stairs to my bird; he had not eaten the seed, and was flitting about in a very restless manner.

As I looked at the slender bill, I saw it was not adapted for cracking seed, but for insect food.

Acting on this surmise, I ran down to the kitchen, took away the fly-blinds from the windows, put a towel in the hands of the Swedish girl, and pointing to a fly said, "Smite, and spare not."

"Spare not," she reiterated, thinking she had learnt the name of a fly.

I nodded assent. It was no time to discuss the niceties of the English language, when my bird was probably starving.

Then I went into the garden, determined to catch something.

First I examined a rosebush, but there was no sign of a grub or a worm, so I got on my knees and looked upward through the branches, when, oh joy! a luscious green caterpillar on the under side of a leaf, just above my head. I detached the leaf, and, judging from the brisk cannonade which had been going on in the kitchen, that a liberal supply of flies awaited me, was considerably disappointed to find that the number of killed and wounded only amounted to six, all told. But half a loaf is better than none, so I flew up-stairs, and had no sooner introduced the caterpillar into the basket, than the sufferer darted upon it with an avidity which left no doubt in my mind as to the kind of food he was accustomed to.

The flies were received with even more favor, and discussed in the same appreciative spirit.

I knew now what food to feed him-but

what could I do with the poor wing! Nature works wonders sometimes, but even she could not knit those fragile bones together, while the owner kept bobbing up and down like a daddy-longlegs.

From my experience of birds, I have observed that they are much tamer when they are allowed the freedom of a room, than when confined in a cage. So I took the little feather-weight out of the basket and placed a shallow dish of water on the floor before him. So thirsty! one, two, three times has he darted his slender bill in the dish, and now he is standing in it to cool his feet, and kissing at me for more flies.

Fortunately at this juncture my Swedish maid appeared with a fresh supply, and I fed them to him one by one, until he was satisfied—until, at last, I saw "balmy sleep, nature's sweet restorer," settle down upon my little bird, when I left the room on tiptoe.

I was unwilling, however, to leave him at large during the night, so the basket was again brought into requisition. But I regret to say, he was not one of those good little birdies that go to bed at sundown, for he was afoot while there was the faintest gleam of light, so I left him to get his head behind his wing before I transferred him to the basket.

Then I began to cast about as to what I could get for his breakfast, and hit upon the expedient of a hard boiled egg made into a paste with pounded cracker. So when I assisted my friend to rise the next morning, I told him that while he remained with me, I should provide egg paste for the staff of life, and that flies and such delicacies would be served for dessert.

He expressed himself perfectly satisfied with this arrangement by every inflection of which a kiss is capable, and fell to work on the paste with a will. Afterward he took his bath, and made his toilet for the day. But my pleasure in watching this dainty operation was greatly marred by the

evident signs of pain it gave the little creature. Still, the wing did not hang down quite so helplessly as on the previous day, so it might not be broken after all.

By this time our acquaintance had ripened into a permanent friendship, and I had leisure to study the dress and appointments of my little friend. Surely I had read the description in "Hints to Audubon Workers." But I could not call to mind whether it was a May hint or a December one. So I took them in order and found the description at last: "The Female Redstart."

And I had been addressing my friend as he! However, it was no use to take the matter seriously, so I laughingly apologized to Mrs. Redstart, for having mistaken her for one of the sterner sex.

She turned her pretty head aside with a quizzical look, and I thought she was laughing at me under her feathers.

There was a little awkwardness at first on both sides, but our friendship rested on too firm a basis to be easily shaken, and whenever I entered my friend's apartment, she would come running up toward me, spreading out her pretty tail like a fan, and kissing at me for the coveted fly which she knew I had brought for her.

The only point of difference between us was my friend's predilection for late hours, but as she frequently indulged in forty winks during the day (more particularly after a surfeit of flies) it was not to be expected that she was ready to go to bed as early as other folks.

On the third morning of Mrs. Redstart's sojourn with me, I noticed a marked improvement in her wing—but it was powerless for flight as yet. So as she could not reach the windows, I threw open the blinds, and let the sunshine stream in, and the flies too. It was a day of unparalleled happiness; the staff of life was left untasted, and flies could be had for the asking, or rather, the catching. I never saw such restless

activity, and I really thought Mrs. Redstart was going mad.

As the room was covered with light matting, she could see a fly on the floor at several yards distance, and no character impersonator ever changed his appearance with more celerity than my little friend, as she darted like a streak at the intruder.

The effect of all this exercise and excitement had a most beneficial effect on Mrs. Redstart, for she took a bath early in the evening, and I found her asleep soon after on top of a roll of paper, but how she got up so high I could not imagine. As she nestled in the paper with her face turned upward, I could not but think of a little child saying its prayers, and I was a great mind to leave her there for the night. But it is always the unexpected that happens, so I gathered her up in my hands, kissed her pretty head, and placed her gently in the basket where I knew she was safe.

I felt now that I should not have my little friend with me much longer, for as soon as she could use her wing she would want to set off on her southward journey, and I loved her too well to detain her against her will, so I resolved to devote as much of my time to her as possible, while she remained with me.

As I knew she liked to get up as soon as she awoke, I took an early peep at her next morning, but was glad to find she was still asleep, and it was not till the clock had struck seven, that she opened her eyes.

"Oh, you little sleepy-head," I exclaimed, "your breakfast has been waiting an hour."

At the mention of breakfast, Mrs. Redstart was wide awake in a moment, and expressed her readiness to get up at once.

We passed a very happy day together, and, as I did not wish my friend to feel that I regarded her as company, I got some light sewing, and sat down on a low stool, quite in an informal way. Presently I noticed a fly on my shoe, and, although Mrs. Redstart was a considerable distance from

me, she saw it too, and before I could be aware of her intention she had darted up my foot, caught the fly, and was off again in the twinkling of an eye.

Seeing my friend was in such a merry mood, I slid off my stool to the floor, and asked her to give me a lesson in fly-catching. So as to be able to run up your foot, too, said I. At the sound of my voice she came dancing toward me like a little fairy, and I was greatly amused at the curiosity with which she regarded me. But she had an eye to business, and, as she had the faculty of turning herself round without apparently using her feet, she seemed to be looking at every point of the compass at once. Nothing escaped her, and woe to the unfortunate fly that lit upon my dress, or buzzed past me. He had no time to say his prayers. Perhaps she thought in her little bird way that I had a lame wing too, for as long as I remained in a recumbent position she never left me.

As the day drew to a close, she began looking about for a resting place, and essayed a short flight, so I was not surprised next morning to see her sweep out of the basket and circle round and round the room, looking down and calling to me from the top of the doors and pictures. But I thought I would give her wing the benefit of one more day's rest, and "to-morrow morning," said I, "I will take you to a beautiful spot that I know of, just fit for a little bird-angel."

Before the day was over, however, I came near having cause to regret that I had not let my little friend go, there and then. I had been absent from the room a short time, and on my return found her posing on the pin-cushion before the looking-glass, and spreading out her tail in the most approved fashion. Then she drew herself up, and the interest and complacency with which she looked down and contemplated her minute black feet was exceedingly amusing to witness, when her

innocent vanity suddenly received a check, and I saw that she had become entangled in the lace on the cushion. I held my breath. If she got frightened and attempted to fly away, she would break her legs, but I did not move, nor even speak, she must free herself, and I could not but admire the coolness and dexterity with which she extricated first one dainty foot, and then the other; when she flew down to me, for a fly if you please.

As she had recovered the use of her wings, she made up her mind to go to bed where she liked, and not where I liked, so I was obliged to call my sister to the rescue, who swooped down on my friend and hustled her into the basket before she knew where she was. As soon, however, as Mrs. Redstart could recover herself, she resented the indignity with becoming spirit, and sprang upward on the netting almost before it could be scrambled over her, where she persisted in remaining in an upside down position till I thought she would dislocate her neck. But she ultimately yielded to my entreaties to reverse herself and go to sleep with her feet downward.

True to my promise, I carried my little

friend the next morning to the spot I had told her about; she understood it all, and was very quiet as we journeyed along.

"This is the place," I said, as I took off the objectionable netting. She flitted into a bush and began looking industriously for her breakfast. Her little heart seemed bubbling over with happiness, and she talked to me incessantly.

"I wish you would fly up into that high tree," I said. "You can be seen so plainly here by passers-by."

She turned her pretty face up to me as I bent over the bush, and it said as plainly as a face could: "You don't mean to take me away!"

"No, my darling," said I, "I don't mean to take you away, but I shall feel you are safer in that high tree."

She must have divined my meaning, for she flew into it directly. And, as she stood looking down at me in the bright sunshine, I kissed my hand to her, and could just hear her soft answering note. And so we parted. And, as I walked homeward in the stillness of the early morning, I felt that my heart had been touched to finer sympathies by my brief acquaintance with a little bird.

EMMA THORNTON.

CHARLEY'S WONDERFUL JOURNEYS

JOURNEY XI.

CHARLEY sat up and looked at the Hesperornis, and the Hesperornis looked at him, and it would be hard to say which was the more astonished. Neither of them spoke a word. Each waited for the other to begin.

"Are you fish, fowl or saurian?" asked the Hesperornis at length, unable to control her curiosity any longer.

"Neither, if you please, ma'am," replied Charley, courteously, and now thoroughly self-possessed; and rising to his feet he folded his hands behind his back, and stood prepared for his examination.

"What in the name of goodness are you then if you are neither fish, fowl nor saurian?" asked the Hesperornis, curiously.

"If you please, ma'am," said Charley, "first came the things that hadn't any brains to speak of, nor any backbone, then came the fishes, and after them the reptiles. Then you came and the Icthyornis"—

"The what?" exclaimed the Hesper-ornis.

"The Icthyornis," repeated Charley; "the other birds that have teeth, and long wings for flying, and dash down and catch the little fishes when they come near the surface."

"But all birds have teeth and catch fishes, don't they? Which one do you mean?"

"I mean the one that's got a fish's backbone, and that's why they call him Icthyornis,"

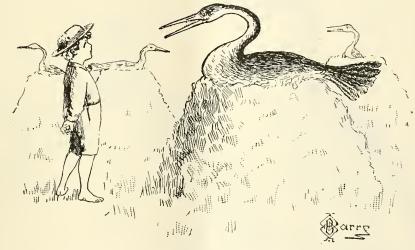
"I am sure I never heard a bird called

are young birds, they'll get teeth before they are as old as I am. Haven't you any teeth?''

"Yes'm," said Charley, showing his grinders.

"But why don't you tell me who you are?" said the Hesperornis. "I keep on asking you, and you keep on telling me about birds, but you're not a bird; now why can't you tell me who you are?"

"If you please, ma'am," said Charley, that's what I was coming to. After the



RISING TO HIS FEET HE FOLDED HIS HANDS BEHIND HIS BACK.

Icthyornis, and you had better not let any of them hear you call them by any such outlandish names. But what has that got to do with you? I asked you what you are."

"If you please, ma'am, that's what I was going to tell you when you asked. First came you and the Icth—. I mean the other birds with the teeth, and next came the birds with beaks and no teeth."

"What became of their teeth?" asked the Hesperornis.

"That I don't know," said Charley; I only know that when you turn over the next leaf of the great stone book the birds hadn't any teeth at all."

"Oh, nonsense, that's only because they

birds came the animals that went on four legs"—

"Oh, I know," said the Hesperornis, "that's the saurians, but they were always there."

"No, ma'am, if you please, not the saurians, because they had cold blood, but four-footed animals with warm blood, like the birds."

"But how do you know that birds have warm blood," asked the Hesperornis, suspiciously.

"Because," said Charley, "if birds sit on their eggs it makes them warm, but if fishes and saurians sat on their eggs it wouldn't."

"That's quite true," said the Hesper-

ornis, "and have you warm blood like the birds?"

"Yes," said Charley.

"Well, that is lucky," said the Hesperornis; "I am sure you must be tired of standing, and you can sit on my eggs while I go fishing."

Charley thought it was a very strange thing to ask him to do, but he was always dropped the fish and stood still with open jaws as if turned to a fossil.

Charley sat very still, waiting for the Hesperornis to speak first, and at length the astonished bird recovered himself sufficiently to say "Hallo."

"Hallo," said Charley, quietly.

"What are you doing sitting on our eggs?" asked the Hesperornis.



THE HESPERORNIS STOOD STILL WITH OPEN JAWS.

willing to oblige, so he said he would keep the eggs warm with pleasure until she came back. So he sat down very softly on the eggs, and she straddled off to the sea to go fishing.

She hadn't been gone very long before her husband came back with a big fish in his jaws, and as the island was all covered with mounds of guano, he never saw Charley until he was close to the nest, when he suddenly caught sight of him, and was so startled at the strange sight that he "Mrs. Hesperornis, that is your wife, asked me to sit on them and keep them warm while she went fishing."

"How dare you call my wife such bad names, I won't stand it," said the Hesperornis, gnashing his teeth with rage.

"If you please, sir," I didn't mean any harm, and it isn't a bad name."

"Isn't a bad name!" screeched the Hesperornis; "what does it mean then?"

"If you please," said Charley, "it only means that you live out west."

"But we don't live out west," said the Hesperornis, "we live here. Who are you anyway, and where do you live?"

"If you please, sir," said Charley, "I'm a boy, and I live in the Nineteenth Century."

"The Nineteenth Century!" exclaimed the Hesperornis, "where's that?"

"It's a long way off in the future," said Charley, "birds with teeth never got as far as that."

"No, I'm sure they never did, nor ever saw anybody like you before," said the Hesperornis; "how did you get here?"

"I think I must have lost a great deal of time," said Charley, "I'm always losing time and getting behind hand."

There was silence for a minute or two, which was broken by the Hesperornis who, by way of changing the conversation, asked, "What sort of eggs do you lay?"

"If you please," said Charley, "folks and animals don't lay eggs."

"Don't lay eggs!" said the Hesperornis, astonished; "then where do the young ones come from?"

"I don't know," said Charley, "it's only the birds that lay eggs nowadays, the folks and the animals are young first, and then they grow up."

"Yes, and sit on birds' eggs, and hatch folks and animals! Oh, I see it all now! Whatever could my wife have been thinking of to go off and let you sit on the eggs, and get chickens with long arms and no feathers or jaws! Oh, I'll teach you."

And with that he snapped his jaws and rushed at Charley, who did not stand upon the order of his going, but sprang up and went so suddenly that he broke half the eggs; then bounding over the nearest mound he made tracks like the wind.

At this moment Mrs. Hesperornis came back with a fish in her jaws. She heard her husband's voice in angry tones, and made all the haste she could, and as she reached the nest she saw him standing over it and looking at the eggs with speechless agony. She, too, took one glance, which was enough; the next instant she caught a glimpse of Charley bounding over a mound; she dropped the fish, and shouting "eggs," in a sharp, shrill tone, set out after Charley at top speed, followed by her husband and all her neighbors, who jumped up from their nests and joined in the pursuit, shouting "eggs" at the top of their voices.

Charley ran like the wind, clearing mound after mound in his flight. Many of these mounds had nests on the top of them, and the birds snapped at Charley's legs as he flew over them, and then got up and joined in the pursuit; but before long Charley left the nesting ground far behind him, and came out on to a broad, sandy plain with groves of palm trees in the distance. The shouting now grew fainter and fainter and finally died away altogether as Charley neared one of the groves, which he found was all of date palms; so he climbed one of the trees and collected a good supply of dates, and then climbed down and had a good feed, slaking his thirst at a crystal spring that rose in the middle of the grove; then wearied of his long journey he sat leaning his back against one of the palm trees and soon fell fast asleep.

When he awoke the Ostrich was grazing close at hand, but he looked around quickly; Charley sat up, and advanced toward him for a talk.

"If you please, can you tell me the way home?" said Charley.

"Where do you live anyway?" asked the Ostrich.

"If you please, sir," said Charley, "I live in the Nineteenth Century."

"I never heard of such a place," said the Ostrich, "but it must be somewhere on the other side of the desert, and if you like you can get up and ride as far as that."

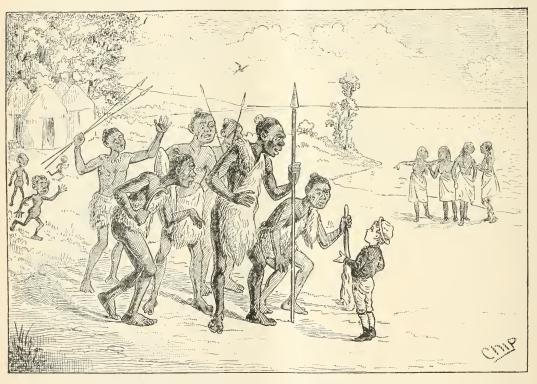
They rode on and on through the desert,

and at last it began to be very monotonous, and Charley amused himself by pulling out the finest of the ostrich feathers, and as fast as he pulled one out another grew in its place.

Then he began to grow drowsy, and when he awoke again the Ostrich was gone, and he was sitting by a stream on the other side of the desert, and by his side "I never do anything without consulting my wife," said the chief, "but she always agrees to everything I say. I suppose you know how to begin?"

"Yes," said Charley, after a moment's thought; "the first thing to do is to make a collection."

"Quite right," said the savage; "let everybody make a collection. The men



"THE FIRST THING TO DO IS TO MAKE A COLLECTION."

were the feathers that he had pulled out of the Ostrich; quite a big bunch.

The savages were hunting at no great distance, so Charley went toward them, and asked the chief if he would be pleased to tell him the way home.

"You had better come home with us," said the chief. "I suppose you're a missionary."

"Yes, I would like to be a missionary now that I'm here," said Charley. "Would you like to be converted?" can go to the woods and collect game, the boys can go down to the sea and collect clams, and the women and girls can go and collect fruit."

Everybody went to work with a will, they all seemed so delighted to have a missionary. The savages soon returned with lots of game, the old women set to work to cook it, and there were clams and fruit, and roast venison, and Charley enjoyed his first dinner as a missionary very much.

They all pressed him to eat more, and

he kept on eating as long as he could, and he really thought he would have a very good time, when all at once he heard something that made him drop his knife and fork and feel very queer. A party of children were whispering together in a corner, and to his horror he heard one of the little girls say as plain as possible, "We shall have roast missionary for Christmas."

Charley stole a rapid glance in the direction of the group of children, and they were all patting their stomachs, and evidently enjoying something in anticipation, but when they saw Charley looking at them, they pretended they were not thinking about anything.

You can imagine his sensations. When he went to his room he thought of nothing but how to get away, and he determined to get up and make a run for it as soon as they should all be asleep, but they sat round the fire talking and laughing until far into the night, until Charley could keep his eyes open no longer, but overcome by exhaustion and a big supper he fell fast asleep. How long he had been asleep he didn't know, when all at once he heard footsteps coming toward his room. At first he dared not open his eyes, but as he heard the handle of the door quietly turning, he sprang up in bed determined to sell his life dearly, and then imagine his delight when he found himself at home, and his mother standing in the doorway of his room.

She laughed when he told her that the savages wanted to make missionary pie of him, but Charley looked very grave about it, for he felt it was no laughing matter.

C. F. AMERY.

REPORT OF DR. MERRIAM.

WE are indebted to the courtesy of Dr. C. Hart Merriam, chief of the Department of Economic Ornithology at Washington, for his report for the year 1887. The report consists of two parts (1) a statement of work done during the year; and (2) special reports embodying results of investigation.

The work of the Division as usual consisted chiefly in the collection of facts showing the relation of certain birds and mammals to agriculture, horticulture and forestry, and in the preparation of two important bulletins (1) on the English sparrow, against which the department has entered on a contest designed to be a war of extermination, and (2) on bird migration in the Mississippi Valley.

Dr Warren's valuable report on the stomach contents of hawks and owls, of which a synopsis was given in the AUDU-BON MAGAZINE, has been embodied by Dr. A. K. Fisher, Assistant Ornithologist, in a report of the contents of 1072 stomachs, all carefully tabulated and serving to bear out the conclusions suggested by Dr. Warren's investigations, only 57 of the 1072 stomachs affording remains of poultry in their food, while 528 contained mice, and 241 insects.

Dr. Fisher contributes further some notes on the depredations of gophers and blackbirds in northern Iowa and southern Minnesota, in which occurs the very pertinent remark "that the chief reason why blackbirds are so troublesome in this locality is that so small a proportion of land is planted to corn compared with the vast area of the surrounding prairie," and he adds that the same state of affairs existed at Storm Lake, Iowa, some years ago, before corn was so extensively raised as at present. This is the key to the whole problem; birds which prey upon the farm-

ers' crops one or two months in the year, do not tend to increase, but on the contrary to decrease with the spread of cultivation, because their numbers are limited by the available food supply at all seasons, and cultivation tends rather to contract than to increase it. Hence it follows that isolated settlers have their crops ravaged by as

many birds as would be distributed over the whole region if all were under cultivation; a conclusion that will doubtless have due consideration attached to it in the recommendations of the department. The country will want all these birds by and by, and their maintenance even at a cost will prove a solid investment.

THE BIRDS OF PRINKIPO ISLAND.

WE have swallows who make their dudish toilets early in the summer. They cleave the clear air of the mountain sides, dart out of the vineyards, and flit amid the pine trees, never seeming to alight. They are quite tame and fearless. One morning, while sauntering up the mountain, I notice that two of these birds are following me. When I stop they hover about my head; sometimes within arm's length. I marvel. What does it mean? Am I near a nest? Are these the father and mother of a brood, as to whose safety the parents are apprehensive? I move on. Still they follow, darting far down into the valley, then sweeping on their electric wing to the very crown of the mountain and about the crown of my hat. I reason that they have been domesticated at the hearthstone or in the chimney, and so I solve the problem.

A month or so ago, one morning, a cloud of blackbirds, our own cornfield larcener, took possession of the woods of the isle. They are known here as petty crows and do much damage. They soon left for better foraging.

This isle is distinguished for quail. They come about the first of September in great flocks. Already some of the pioneers have heralded their approach. From the hills opposite our villa shots are heard in the morning. When the season is full it is dangerous to be about the woods, the shots

are so numerous. These birds are migrating from the grain plateaus of Russia to the balmier fields of Egypt. Their resort here reminds me of the wild pigeons in the West in Ohio in my old district in Licking county, where for years they were wont to come and roost as regularly as the seasons came. They made the air black. They covered trees and fences with their multitudes. The quail here are not so numerous; but they fill the shrubbery. Some of the rich folk of the isle are buying up preserves to limit their destruction. After a few weeks' rest, during which they are massacred by the thousands-even by boys with sticks—the survivors take flight over the sea to San Stefano, or the shores of the Hellespont, en route for "winter sunbeams." Antigone rises sheer 500 feet. Her sides are full of caves. What are those white flowery specks mingled with the rock and greenery? We soon ascertain, for have we not discovered and aroused the gulls and cormorants that here nestle? They come out of their nooks by the thousand and keep up such a clamor that it seems like the angry protest of a bird mob against the invasion of their haunts by our launch. These are the birds which make Marmora and the Bosphorus so full of life, even when the hot air silences all other noise and motion. They are never disturbed or killed by the inhabitants. They have a monopoly of the isle. They are gentle as

all inhabitants of the isle—which is named after the heroine of Sophocles—should be. The tameness of the birds is not limited to the Island of Prinkipo. All through the mosques and groves and walls and gardens of the old city of Stamboul you hear a universal twitter and the fluttering of wings, which indicate the life of the birds. The sparrows fly in and out of the houses. The swallows, which seem partial to my presence, fix their nests in every convenient arch in and out of the bazaars. The pigeons are maintained by many and have

a mosque of their own named after them. The gulls rival in number the turtle doves, the one having dominion of the air, and the other of the woods and cemeteries. The halcyons fly in long ranks up and down the Bosphorus, as if restlessly intent on some very earnest business; while the grave and dignified stork sits upon the towers of Anatolia and Roumelia and upon the cupolas of the grand mausoleum. The Turk never harms these birds. Every bird has a little office of trust which it executes for this wild, reckless and sanguinary Turk.

Samuel S. Cox, in "The Isles of the Princess."

BIRD LEGENDS.

I N Norway, the woodpecker is called "Gertrude's bird" "Gertrude's bird," from the following legend: "One day our Lord was walking with St. Peter, when they fell in with a woman named Gertrude, who wore a red cap and was busy baking. Our Lord, being tired and hungry, begged for a piece of cake. Accordingly, the woman took a little dough and set it in the oven, but it rose up so high that it filled the whole pan. Then she thought the cake was too large for an alms, and taking less dough, she recommenced baking. Again the cake rose up to its former dimensions, and was again refused to the weary wayfarers. When the same thing happened at the third attempt, Gertrude said: 'Ye must e'en go your ways without alms, for all my cakes are too large for beggars.' Thereupon, our Lord replied: 'As thou wilt give me naught, thou shalt be punished by being changed into a little bird, thou shalt seek thy scanty food in the bark of trees, and thou shalt only drink when it rains.'"

Scarcely had these words been spoken, when the woman was transformed into the "Gertrude's bird," and flew out by the chimney. Up to the present day she wears

her red cap, but the rest of her body is black from the soot of the chimney. She is always pecking the bark of the trees and screaming for rainy weather, because she is always tormented by perpetual thirst.

The turtle dove is a sacred bird. Swabian peasants call it "God's bird," and say that the house where doves are kept cannot be struck by lightning. If there is a sick person in the house, the turtle dove grieves and will not coo. Sometimes it mourns for years over a death. People who suffer from erysipelas generally keep doves, declaring that they draw the illness to themselves, and as a proof of this the bird's feet become scarlet.

The quail has the gift of prophecy. In some parts of Tyrol the number of his calls is believed to denote the price of corn, each call signifying a gulden. In other parts, if he calls six times, the year will be a bad one; if eight times, it will be tolerably prosperous; but should he call ten times, or beyond that number, everything will flourish.

Sparrows, on the contrary, have no special virtues, and whoever eats them will have St. Vitus's dance.

THE AUDUBON NOTE BOOK.

AUDUBON SOCIETY.

THE total registered membership of the Society on October 31 was 48,046, showing an increase of 205 during the month, drawn from the following sources:

New York	72	Ohio	17
Maine	18	Indiana	ĭ
Vermont	22	New Jersey	4
Connecticut	22	Maryland	2
New Hampshire	II	North Carolina	2
Massachusetts	10	Florida	2
Pennsylvania	20	Canada	2
		-	
			205

C. F. AMERY, General Secretary.

AUDUBON MONUMENT.

THE following subscriptions on behalf of the Audubon Monument have been received in this office since last acknowledgment. Other contributions from members of the Society have, we believe, been sent direct to the Central Committee, but the contemplated fall meeting has not yet been held:

Edmund Rodman, New Bedford, Mass \$1 00	0
Miss M. J. Coburn, Providence, R. I	0
Miss Mary Bartol, Manchester, Mass 5 co	О
Miss Bartol's friend 1 oc	О
D. B. Williams, Irvington, N. Y	5
Lucy Williams, Irvington, N. Y 2	ő
J. A. Williams, Irvington, N. Y	5
L. A. Edwards, Irvington, N. Y 25	5
Charlie Edwards, Irvington, N. Y 23	5
Harry Edwards, Irving.on, N. Y	5
Margaret Edwards, Irvington, N. Y 25	5
Bessie Edwards, Irvington, N.Y	5
\$9.20	2

"CHARLEY'S WONDERFUL JOURNEYS."

THESE stories have been so cordially appreciated and have drawn forth such flattering comments from the readers of the Audubon Magazine, that the author and publishers have been encouraged to reproduce them in book form. The book, which will be ready for issue in a few days, is a handsome imperial octavo volume of 116 pages, thick paper and large print. It contains some hitherto unpublished journeys, with a description of Charley's home in a wild romantic valley in Northern Maine; and in addition to the admirable illustrations by the elder Bellew, now deceased, and Bennett, it has been liberally embellished with drawings by Frank Bellew (Chip) and Miss Etheldred Breeze Barry. Indeed no pains have been spared to render it a charming Christmas gift book. Forest & Stream Publishing Co. Price, \$1.50.

"BIRD PORTRAITS"

Some Native Birds for Little Folks. By Dr. W. Van Fleet. Illustrated by Howard H. Darnell. Forest & Stream Publishing Co. Price, \$3.00.

This is the title of a tastefully got up imperial octavo volume, beautifully illustrated by photogravure portraits of the birds described, making it a pretty and most attractive book for the holiday season. Nor is the reading matter less attractive. The large clear type on thick paper makes the reading look so delightfully easy that the smallest children, knowing their letters, will confidently attempt to spell it out. The birds, too, are among the most familiar to American children, the list comprising the Robin, Chickadee, Kingfisher, Great Horned Owl, Bobolink, Blue Jay, Woodcock, Nuthatches, Meadow Lark, Ruffed Grouse, Cedar Bird, Kildeer Plover, Summer Duck and Crossbill. The descriptions are written in an entertaining style, rendering it a very pleasant task for children to familiarize themselves with the ways and habits of the birds so charmingly portrayed.

One of the prettiest and most instructive books for the holiday season.—The Evening Post.

A picture gallery and history of birds in one volume.—Sandusky Register.

TO THE YOUNG MEMBERS OF THE AUDUBON SOCIETY.

Dear Children:

Do you know that you are living in a particularly good and interesting period of the world's history? Especially is it true that goodness is made so attractive and easy nowadays, that we are every day more readily ashamed of any cruel deed; yet thoughtless habits are still common and there is a great deal of unconscious destruction at work on our grand old earth which it is a pity to think of, and which will surely cease when all mankind shall have learned to see clearly and to think rightly.

Let us bless the Audubon Society for showing us what sad havoc we are making with the beautiful and useful gifts of the Creator, and prove our gratitude to it by taking its principles to our hearts and standing loyally to our colors, striving at the same time to bring others to a knowledge of the truth.

How I wish there had been some such society when I was young! Now I am middle-aged and find myself blushing with shame to think I ever bought a dead bird and thought my hat becoming with one on it!

But at that time we were so used to seeing rows of birds in the milliners' show cases that we looked upon them almost as manufactured articles—like ribbons and velvets, and did not realize that these birds had to be murdered before they could arrive at the dignity of becoming millinery. We city people know but little of birds, our varieties being so limited, and we imagine that those living in freer spaces, where birds abound, must love them devotedly; but it is not always so, for only last summer, when I spoke admiringly to a farmer of the lovely birds to be seen in numbers on every part of his farm, I was surprised to find that he had never noticed them particularly, knew nothing of the varieties, and marvelled at my enthusiasm.

Then I remembered Whittier's lines:

"Unto him who stands afar, Nature's marvels greatest are!"

—yet this is not always the case either, for the people in that vicinity value their birds highly and have made strict laws to insure their safety.

Flying around this farm where I spent the summer were robin-redbreasts, bluebirds, swallows, little brown birds who made their nests in the wheat low down on the ground, bright yellow birds and woodpeckers. These last are beautiful and interesting; the general effect of their coloring is a steel-gray, but on examination we find that some of their tiny feathers are black, some white, and many a soft mouse-color, all blending to make a harmonious whole-a sort of half mourning little creature. But though he wears the mourning livery, he does not devote himself to idle grieving, for he is very active in his particular line of business, which is to hunt and capture the insects hiding in the cracks of the tree-bark; in this search he runs very rapidly around and around the trunk of a tree, beginning at the root and working his way up, or starting above and going down, winking and blinking, pecking and picking so fast that one cannot believe a grub could escape. He is so eager and so bright and twitches and twirls at such a rate, that if you watch one a little while you will find yourself ready to laugh and will feel like asking him if he couldn't be a little more moderate, or if he never had anything to eat before.

Every one knows the graceful dip of the swallow in its happy excursions toward cloudland; could one ever tire of watching him execute his curves and angles of a joyous freedom? It was many years since I had been on a farm, so I was fresh to enjoy its delights. Often I went with the children to the field when the mowing was in progress, where we would stay for hours, lying in the hay-wagon or sit-

ting on heaps of new mown hay, and then the dear birds always came and entertained us.

Of course we sat very still so that they would hop around on the ground close to us, picking up grains and seeds or catching the worms brought into view by the mowing.

Familiarly and happily they worked and played together, the robin and the ground bird, the bluebird and the yellow.

Splendid fellow this last, with black tail and wing tips, and black on his pretty head.

What pleased us most of all was to see several of them at a time perched on the broad part of a rake as it stood upright, the handle planted in the ground. There they would gather, such pretty contrasts, hopping and twittering, balancing airily, sometimes reverently still for a moment, looking quite contemplative, as if dimly aware of subtle surrounding mysteries; now and then breaking forth into a lovely burst of song and at last flying away happily or pouncing down on some savory grub, who didn't know enough to keep out of sight.

All this time the swallows—who are not given to perching—darting out of their nests under the eaves of the barn, circled and soared, dipped and swayed, now close above our heads and then far off in the heavenly sky, doing so perfectly that which they were made to do, while quite unconscious of the vital charm their presence added to this soothing pastoral scene.

All summer long I watched these lovely creatures with an interest such as I had never felt before, and when the Audubon Society was brought to my notice soon after my return to city life I felt that I had had a special preparation for its work—the seed fell on plowed ground.

There is one thought, dear children, I want to leave with you; if you will understand it, it will help to make you reverent.

It is this: that every bird is "an expression of a thought of God."

You have a thought in your mind and speak it, then it is a word or a sentence. God makes his thoughts into forms and they are his words and sentences. He thinks of grace in motion and makes a swallow; He thinks of sweet music on the summer air and makes a robin and a thrush; He thinks out a yellowbird and a bluebird for contrast and puts them before our eyes to show us how He loves beauty of form and color, leading us to believe He loves, therefore, beauty of heart and life.

These all tell His thoughts to us, and the more reverently we study them the more our minds will open toward heaven, and the light of His knowledge shall fall upon us as dew upon the flowers at night.

EMINENT PEOPLE ON BIRD PROTECTION.

OAK KNOLL, Danvers, Mass., and mo., 20, 1886.

Editor Forest and Stream:

I heartily approve of the proposed Audubon Society. We are in a way to destroy both our forests and our birds. A society for the preservation of the latter has long been needed, and I hope it is not too late for the accomplishment of its objects.

I could almost wish that the shooters of the birds, the taxidermists who prepare their skins, and the fashionable wearers of their feathers might share the penalty which was visited upon the Ancient Mariner who shot the Albatross. Thy friend,

JOHN G. WHITTIER.

BROOKLYN, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I am heartily in sympathy with your purposes for the protection of birds, and should be glad to contribute any influence that I can to that end.

If there were no purchasers there would be no deland, and no reason for slaughtering these winged gems. But as only women create a demand, it rests upon them to stay this wanton destruction. I am sure that it is only necessary to bring before American women the cruelty of this "slaughter of the innocents" that fashion is carrying on, to secure a renunciation of this ornament and the salvation of birds.

On this subject the kind feelings, the taste, and æsthetic sympathy of the whole community are on your side, and if you persevere you will surely win.

HENRY WARD BEECHER.

Cornwall-on-Hudson, N. Y., Feb. 22, 1886.

Editor Forest and Stream:

You have indeed my hearty sympathy in every effort to prevent the slaughter of my innocent little neighbors and friends, the birds. In the destruction of forests and birds, the people of this land are inviting very great evils and inflicting wrongs on posterity which scarcely can be measured. The press should render it impossibe for women to sin thoughtlessly and ignorantly in demanding little birds for their adornment. The evil should be brought home so fully to the knowledge of all, that the continued wearing of our useful little birds should become the badge and indication of a callous, vulgar nature. You are doing a humane and patriotic work in exciting public aversion to one of the most cruel and stupid wrongs of the age.

Respectfully yours,
EDWARD P. ROE.

WEST PARK, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I scarcely need assure you that your undertaking to form a society for the protection of our wild birds against the ravages of the milliners and the sham scientific collectors has my warmest sympathy and approval. It is a barbarous taste which prompts our women and girls to appear upon the street with their head gear adorned with the scalps of our songsters; and it is mere vanity and affectation which prompts so many persons to make up cabinets of the nests and eggs of the same. The destruction of our birds from their natural enemies is immense, and this craze of the collectors, and folly of the milliners and their customers in addition, threatens their serious diminution.

I hope you may succeed in creating so strong a public sentiment upon the subject that the collectors of skins and eggs for the unworthy purposes of fashion or to indulge the vanity of pseudo-naturalists may suddenly find their occupation gone.

Please add my name to the list of the members of the AUDUBON SOCIETY. Very sincerely,

JOHN BURROUGHS.

160 W. 59TH STREET, NEW YORK, Feb. 20, 1886.

Editor Forest and Stream:

No one who will take the trouble to give the matter a few moments' serious consideration can be in doubt, I think, as to the wisdom of organizing the AUDUBON SOCIETY, and I am thankful that such a step is contemplated. There is an element of savagery in the use of birds for personal decoration, which is in grotesque contrast with our boasts of civilization. But even the savage stops short, as a rule, with the feathers. It is only Christian people who think it worth while to butcher a whole bird to adorn their head gear. I am sure, however, that this is largely from that unreflecting habit which is a leading vice in people who follow the fashions. But it is a vice; as Hood sang, when he wrote—

For evil is wrought
By want of thought
As well as by want of heart.

If the Audubon Society can teach men, and especially women, to think on this subject, half of the battle will have been won. Henry C, Potter.

Andover, Mass., Feb. 21, 1886.

Editor Forest and Stream:

I am in earnest and indignant sympathy with the motive of any society organized to prevent the murder of birds for decorative purposes.

E. S. PHELPS.





THE HERMIT THRUSH.

(Turdus aonalaschkie pallasii (CAB.))

THE AUDUBON MAGAZINE.

VOL. II.

JANUARY, 1889.

No. 12.

THE HERMIT THRUSH.

NE of our most abundant birds during the seasons of migration, and only at those times is the Hermit Thrush. It comes to us in New York and New England every spring during the month of April, lingers for perhaps a month, and in May takes its flight for its summer home, leaving us as unobtrusively as it came. when the harvest has been gathered and the barns are full, when the ripened leaves are turning golden and red and brown, and the shorn stubble lies yellow in the slanting sunshine, when the nights have become cool and sometimes in the early morning the grass of the meadows sparkles with white hoar frost, then the Hermit Thrush is seen again hopping silently about at the edge of the wood or taking short flights from bush to bush along the hedgerows. In the autumn this bird stays with us longer than in spring, and sometimes lingers into December, but it is in October that they are most abundant in our woods. The southern migration is performed slowly in loitering fashion, the birds seeming to move singly and never gathering in flocks.

The Hermit Thrush is a shy, solitary bird, fond of the deep woods and usually shunning the fields and open spots. Curiously enough, both Wilson and Audubon considered this species as almost voiceless. Wilson supposed it mute, and Audubon speaks only of its single plaintive note, while as a matter of fact it is one of our

sweetest songsters. Nuttall, however, alludes to it as scarcely inferior to the nightingale in its powers of song, and says that it "greatly exceeds the wood thrush in the melody and sweetness of its lays." Its song has indeed been commented on by all later writers. As remarked by Dr. Coues, however, "it may be questioned whether a comparison unfavorable to the wood thrush is a perfectly just discrimination. The weird associations of the spot where the Hermit triumphs, the mystery inseparable from the voice of an unseen musician, conspire to heighten the effect of the sweet, silvery, bell-like notes, which beginning soft, low. and tinkling, rise higher and higher, to end abruptly with a clear, ringing intonation. It is the reverse of the lay of the wood thrush, which swells at once into powerful and sustained effort, then gradually dies away, as though the bird were receding from us; for the song of the Hermit first steals upon us from afar, then seems to draw nearer, as if the timid recluse were weary of solitude, and craved recognition of its conscious power to please. Yet it is but a momentary indecision; true to a vow of seclusion the anchorite is gone again to its inviolate grotto in the fastnesses of the swamp, where a world of melody is wasted . in its pathetic song of life."

Most of the Hermit Thrushes pass the winter in the Southern States, and indeed it is not certain that this bird goes south of the United States during its winter migration. At all events we know that great numbers of them spend the cold months in the swamps of Florida, Louisiana and Mississippi. Its summer home is to the northward. A few, perhaps, rear their young in northern Massachusetts, but most of them proceed still further north, and find a congenial resting place in the dark and lonely forests which clothe the almost uninhabited region between the River St. Lawrence and Hudson's Bay.

The nest of the Hermit Thrush is built on or near the ground, and all the earlier descriptions of it are at fault. Wilson, Audubon and Nuttall all speak of it as being placed in the branches of a tree at some distance from the ground, and in a latitude far south of where it is now known to breed. There can be little doubt that they mistook the nests of a closely allied species, the olive-backed thrush, for those of the Hermit Thrush. Dr. Coues's description of the nest is as follows:

"The manner in which the nest of the Hermit Thrush is built, its situation, and the eggs are all so similar to the Veery's [or Wilson's thrush] that one must detect the shy parents themselves before being sure which has been found. The nest is built on the ground or near it, generally in some low secluded spot; no mud is used in its composition, the whole fabric being a rather rude and inartistic matting of withered leaves, weed stalks, bark strips, and grasses, the coarser and stiffer substances outside, the finer fibres within. The cup is small in comparison with the whole size, owing to the thickness of the walls and of the base. The eggs are like those of the robin or wood thrush, in their uniform greenish blue color, but smaller, measuring about nine-tenths of an inch in length by five-eighths in breadth; being thus not distinguishable from those of the Veery."

The food of the Hermit Thrush consists for the most part of insects, though in the

autumn they feed to some extent on berries as do most of the thrushes. A good portion of its time is spent on the ground, where it hops about in search of its food among the dead leaves and twigs, flying when disturbed into the low branches of the trees or bushes, uttering a plaintive note of alarm.

The true Hermit Thrush is confined to Eastern North America, but two near relatives of this species are found on the West. One of these, the Dwarf Hermit Thrush, occurs chiefly along the Pacific Coast, from Alaska to Lower California; the other, Audubon's Hermit Thrush, inhabits the Rocky Mountain Region. Both of these races resemble closely the Hermit Thrush and can only be distinguished from it by an ornithologist, but besides some trifling differences in color the Dwarf is slightly smaller and Audubon's a little larger than the Eastern bird. The habits of all of these birds are essentially the same and one account will do for all of them.

The illustration is reproduced from Audubon's plate of this species and represents two of these birds on the branches of a bush called "robin wood," on the berries of which these birds and many others feed in autumn.

The Hermit Thrush in general appearance is closely like the familiar wood thrush, but is much smaller, and the color of the upper parts is a dull olive brown very different from the bright rufus tint of the feathers of that bird. Its length is seven inches, and across its extended wings it measures ten and one-half. Above it is deep olive brown in color, below dull white, the neck and breast spotted with dark brown. The secondary wing coverts are marked with concealed spots of yellow. The bill is blackish brown above and yellowish below. The iris is dark brown and the feet and legs white. The female is a little larger and a little darker than the male.

ALEXANDER WILSON.

VIII.

DURING the next two or three years Wilson resided principally at Philadelphia, writing and superintending the bringing out of his work, varying these sedentary occupations with extensive excursions into the neighboring country. The coloring of the plates gave him a great deal of trouble, this branch of the art being but little understood in this country, and, in his desire to make his illustrations as true to nature as possible, he endeavored to master its difficulties, and with fair success, for his biographer tells us that he wrought at this department himself.

In 1812 Wilson set out on an expedition into the Eastern States, ostensibly for the purpose of visiting his subscribers and settling accounts with his agents, but from a short letter written to Mr. George Ord, giving an account of his excursion, it is evident that if he attended to his business as author, he managed to mingle with his business the pleasures of his pursuits as a naturalist. As this letter is the last of the series from which his biography was compiled, and of no great length, we give it in full.

"Boston, October 13, 1812.
"To Mr. George Ord:

"DEAR SIR: It is not in my power at present to give you anything more than a slight sketch of my ramble since leaving Philadelphia. My route up the Hudson afforded great pleasure mingled with frequent regret that you were not along with me to share the enjoyment. About thirty miles south of Albany we passed within ten miles of the celebrated Catskil Mountains, a gigantic group clothed with forest to the summits. In the river here I found our common reed (*Tizania aquatica*) growing in great abundance in shoals extending across the middle of the river. I saw flocks

of redwings and some black ducks, but no rail or reed birds. From this place my journey led me over a rugged mountainous country to Lake Champlain, along which I coasted as far as Burlington in Vermont. Here I found the little coot-footed tringa or phalarope that you sent to Mr. Peale; a new and elegantly marked hawk; and observed some black ducks. The shores are alternate sandy bays and rocky headlands running into the lake. Every tavern was crowded with officers, soldiers and travel-Eight of us were left without a bed; but having an excellent great coat I laid myself down in a corner with a determination of sleeping in defiance of the uproar of the house and the rage of my companions who would not disgrace themselves by a prostration of this sort. From Lake Champlain I traversed a rude mountainous region to Connecticut River, a hundred miles above Dartmouth College. I spent several days with the gun in Grafton and Ryegate townships, and made some discoveries. From this I coasted along the Connecticut to a place called Haverhill, ten miles from the foot of Moose hillock, one of the highest of the White Mountains of New Hampshire. I spent the greater part of a day in ascending to the peak of one of these majestic mountains, whence I had the most sublime and astonishing view that was ever afforded me. The immensity of forest lay below, extending on all sides to the furthest verge of the horizon; while the only prominent objects were the columns of smoke from burning woods that rose from various parts of the earth beneath to the heavens; for the day was beautiful and serene. Hence I traveled to Dartmouth and thence in a direct course to Boston. From Boston I passed through Portsmouth to Portland and got some

things new. My return was by a different route. I have procured three new and beautiful hawks; and have gleaned up a stock of materials that will be useful to me hereafter.

"I hope, my dear sir, that you have been well since I left you. I have myself been several times afflicted with a violent palpitation of the heart, and want to try whether a short voyage by sea will be beneficial or not.

"In New England the rage of war, the virulence of politics, and the pursuit of commercial speculations engross every faculty. The voice of science and the charms of nature, unless these last present themselves in prize sugars, coffee or rum, are treated with contempt."

There are few additional records of the short remaining term of Wilson's life. The seventh part of the "Ornithology" was far advanced and soon after its publication Wilson set out accompanied by Mr. Ord on an expedition to Egg Harbor to procure materials for the eighth volume which would principally have contained the marine waterfowl. This was his last expedition and occupied nearly four months. On returning to Philadelphia the anxiety to perfect the forthcoming volume, which he thought would bring his labors nearly to a conclusion, and show him the end of a work to which he looked for the achievement of a lasting reputation, brought on an attack of his old complaints, which had gradually become more frequent when his mind or body was harassed or agitated for the accomplishment of any favorite project. His last illness is said to have been caused by a cold contracted during a long chase after some much desired bird, in the course of which and when much overheated he swam several rivers and small creeks; the immediate cause of his death was dysentery to which he had acquired a chronic tendency by previous exposure, and to this last and fatal attack he succumbed after an illness of ten days at the early age of fortyseven years, leaving the task he had allotted himself in some measure incomplete, but not before he had fairly earned the reputation for which he had so ardently craved. As a poet he still enjoys a local reputation in his birthplace, but his claim to our recognition rests on his labors as an ornithologist. He is the pioneer ornithologist of the United States, a man who traveled far, observed carefully, and scrupulously refrained from making any statements which were not of his knowledge, thus establishing a knowledge of the birds of America upon a sound foundation which became the starting point for future observers.

C. W. Webber closes his resume of Wilson's career with the following critical remarks:

"We will not add to the gloom which followed the illustrious life of poor Wilson to his grave by any officious comments upon the tenor of this short narrative. I will add, though, that it should be remembered, in forming any judgment of that strange moody man, that he had bitter woes enough to contend with, not only in his friendless early days, but in the harsh isolation of his weary wanderings and unappreciated after-life, to have grown a gall beneath an angel's wing.

"Withal, the bursts of sunshine and exultation which shone through his eloquent writings often show that his inner self had fed healthfully sometimes upon the pure and peaceful teaching of his gentle pursuits. He was a man whose profound genius, darkened by misfortune, was sombrely illuminated by a noble enthusiasm. He, too, may be accepted as a hunter-naturalist, but not as first among them all. To J. J. Audubon, undoubtedly, that high place belongs, though this has been disputed by many, and even Christopher North has been found to assert them as 'equals.'

"When the noble work of Wilson, the

unknown Scotchman, began to make its appearance, ornithology among us was in its infancy, and the freshness of his hardy original genius was promptly recognized and keenly relished abroad, in contrast with the stale, unprofitable treatment of the predominant schools of the technicolists. It was at once perceived how much the attractiveness of his object was heightened by the circumstances of his personal intimacy and association with the creatures described in many of the conditions of natural freedom. His fine descriptions had the flavor of the wilderness about them. birds were living things, and led out the heart in yearning through the scenes of a primeval earth to recognize them in their own wild homes, singing to the solitude from some chosen spray, or plying with careless grace, on busy wing, their curious sports and labors."

* * *

"While the biographies of Wilson were full of natural spirit, of grace and power, greatly beyond all his predecessors, yet those of Audubon are far more minute and carefully detailed, introducing us, one after another, to a more intimate fellowship with each individual of the wide family of his love, through every piquant and distinctive trait of gesture, air, and movement, characterizing all the phases of their nature—without the faults of generalization, and too much credence to hearsay, or a gloomy and unphilosophic spirit, since the mild and loving geniality of childhood breathes through every line."

But in instituting a comparison between the result of the labors of Alexander Wilson and those of his great contemporary John James Audubon, it should always be borne in mind that the latter were the fruits of a long life time, while Wilson's labors were concentrated into the little space of seven years.

His private life was irreproachable, his character estimable, and many of those with whom his literary labors brought him in contact became warmly attached friends.

He was buried in the burial ground of the old Swedes Church at Philadelphia, and the account of a recent visit to his grave by Mrs. Helen V. Austin in this present number will be read with interest.

OUR WINTER BIRDS

IN THE VICINITY OF DUNSTABLE, MIDDLESEX CO., MASS.

OW many birds have we got in winter? I do not know of any! say some. I never saw but two or three birds, say others, that perhaps have lived in the country all their lives.

But here is a boy that says: "I know, there's the jay bird and chickadee, sometimes crows, and one winter I saw an owl." That's right, my boy, now just keep your eyes and ears open, and soon you may get sight of a number of other varieties. On cloudy or stormy days you may especially look out for owls. You may see one on a tree by a meadow or perhaps you see one flying, with a flight similar to the hawks.

only the period of sailing is much smaller. Although thirteen species of owls are given by Prof. W. A. Stearns as occurring in New England, but few observers would be likely to be fortunate enough to observe much more than one-half that number, alive, in a lifetime.

Whenever we are in the vicinity of woods or meadows, even near villages, the watchful eye may get a glimpse of a great horned owl (*Bubo virginianus*) also called "bat owl," "hoot owl," or "hooter." This bird may be known by its large size and dark color. On rare occasions we may possibly see the snowy owl (*Nyctea scandiaca*) or

the still more rare great gray owl (*Strix cinerea*). Both these are of very large size and light color.

Sometimes we may also get sight of the barred owl or smooth head (Strix nebulosa). This species is a little smaller than the great horned and can be distinguished if near, by the absence of eartufts and a much more ashy shade than the great horned. A specimen of the screech owl (Scops asio) may possibly be found in some barn loft, outhouse or hollow tree. This little owl is very similar to the great horned except in size, being only about nine inches long. A peculiarity of this species is their two styles of dress, the red and gray plumage. Why this freak of coloration (without apparent relation to sex, age or season) I do not think has been fully explained.

We may also look for the longear owl (Asio wilsonianus), the shortear owl (Asio accipitrinus) and the little saw whet owl (Nyctala acadica), the latter being smaller than the screecher, and resembling the barred in form and color.

As this family are all nocturnal in their habits, and are trapped extensively, they are not likely to be observed very frequently.

The bluejay (*Cyanocitta cristata*) and black-capped chickadee (*Parus atricapillus*) are probably our best known, as well as our most common winter birds.

Perhaps the tree sparrow (Spizella monticola) is our next most common bird, as it is often seen in this section in quite large flocks. This bird resembles our chipping sparrow, or hair bird of summer, very much, but is a larger and stouter bird.

The quail or Bob-White (Ortyx virginiana) and partridge, or ruffed grouse (Bonasa umbella), may often be seen quite near buildings, or by the roadside, as we drive by. A bird of the latter species flew against the side of our house, a few years ago, with sufficient force to kill it. At a neighbor's one flew through a glass window into their

pantry, and made sad havoc among the dishes, etc.

A few specimens of the crow (Corvus frugivorus) usually remain with us all winter in certain localities. The great northern shrike or butcher bird (Lanius borealis) visits us occasionally, from the north. This bird is a little less in size than our common jay, has a smooth head and toothed bill, is of a slaty gray color, with black (or dark) wings, white tipped, and light breast with very fine wavy lines of slate.

The Canada jay (*Perisoreus canadensis*) may occur here rarely. I remember of a specimen being shot some years ago a few miles from here. Size somewhat smaller than common jay, marked similar, with slate in place of blue. Has no crest on head.

We may be on the watch at any time for one of the two varieties of woodpeckers that remain here all winter, the hairy (*Picus villosus*) or the downy (*Picus pubescens*). Or for either of the nuthatches, with their peculiar *quank* note, and their interesting gymnastics about tree trunks.

The white-bellied nuthatch (Sitta carolinensis) and red-bellied (Sitta canadensis) are sometimes seen through the winter.

The linnets of the finch family, especially the redpoll linnet (*Egiothus linaria*), and pine linnet (*Chrysomitris pinus*) are common through the winter. They may be seen frequently on birch trees, feeding on the seeds.

A peculiar, and somewhat common, winter visitor and resident is the red crossbill (Loxia curvirostra americana). This bird has a strong hooked bill, the upper mandible crossing over the under. They feed largely on pine seeds.

I will also mention the snow bunting or snowflake (*Plectrophanes nivalis*), which, when seen flying over, looks much like a snowflake in color. Specimens vary much, but usually have black or dark on back and wings. Size somewhat less than robin redbreast.

As this locality is some distance from the coast, and most of our water is frozen over during the winter, we do not get many visits from the water birds except now and then a few merganser ducks or an occasional grebe.

In a list from memory of birds that we

may expect through the winter, I have thirty-six. Divided as follows: common winter residents twelve, rare residents or common visitors eight, rare or accidental visitors sixteen.

So, although we may be out days, without seeing anything but jays, we can feel assured that there are birds around, and perhaps the next time we will see many species in a short time.

C. W. SWALLOW.

THE GRAVE OF ALEXANDER WILSON.

I T was a breezy day in spring when I set out to visit the grave of Alexander Wilson, a day "when all the world gives promise of something sweet to come." The fragrance of tender grass and swelling buds filled the air. After the city was reached the horse cars conveyed me within a short distance of the sacred spot.

The grave of Wilson is in the burial ground of Gloria Dei, more familiarly known as the old Swedes' church, at Philadelphia. It is in that part of the city which is frequently spoken of as old Philadelphia. Many of the names of the old Swedish settlers are still attached to the locality, Swanson street being one of the old landmarks. The place was called Wiccaco by the Indians, meaning a pleasant place, and this name still lives as marking certain points in the neighborhood. The primitive log church, or "Swedes' House," was also called the Wiccaco Church, and there was originally attached to it twenty-seven acres. present church was built in 1700. The square black and gray bricks of which it is built were brought from England. church has passed from the original owners, the Lutherans, and is now owned by the Episcopalians.

The historian tells us that Alexander Wilson desired to be laid at rest where birds amid the trees, might sing over his

grave. It was a pleasant place in days of old, but now, alas! the place is changed. The church yard is surrounded with humanity and traffic. It is true the broad Delaware flows on majestic to the sea, just beyond the church and its precinct; but a street, with a railroad track in the center. over which pass unsightly freight trains, bounds the wall of the grounds, and beyond the street grain elevators and warehouses shut out the river view. There is no hint of the river except the tall masts of ships that tower above the buildings. In old times the church stood on an elevated river bank, but now the street is cut down and the river is pushed back, as it were, by filling in, and instead of the entrance to the grounds being on Swanson street, it is on Oswego street, on its west side. Here is an iron fence, and over the arched gateways the legend "Gloria Dei." A stone walk leads through the silent city of the dead to the church. The quaint old church is of the utmost interest, but we pass it by at this time, and examine the still more quaint tablets that mark the graves of those who were first laid to rest in this historic spot. Many of the inscriptions have been obliterated by time. Passing along the narrow walk between the mounds with their unpretending tablets, it is easy to discern the grave of Wilson. It is marked by an inclosed white marble tomb, rising about three feet above the ground, without carving except the inscription on the slab, which is as follows:

THIS MONUMENT
covers the remains of
ALEXANDER WILSON,
Author of the
AMERICAN ORNITHOLOGY.
He was born in Renfrewshire, Scotland,
On the 6 July, 1766,
Emigrated to the United States
In the year 1794,
And died in Philadelphia
On the 23 August, 1813.
Aged 47.
Ingenio stat sine morte decus.

There are some venerable deciduous trees and a few arbor vitæs growing here, and the place has an air of restful sanctity about it, but there is no deep shade nor tangle of vines nor seclusion; nothing of the rural cemetery aspect which Wilson would have loved, or that would invite the birds to build

their nests and sing above his grave. The European sparrows clustered about the adjoining buildings, uttering their discordant, complaining notes, which was more like a mockery of the wishes of the great ornithologist than silence would have been.

Commerce, merchandise, and the dwellings of the uncultivated and illiterate bound this little cemetery on every side. The old church with its sacred associations and historic record is visited by hundreds annually, and this will always be a remembered spot, never to fall into neglect. But no song birds wake the silence with their sweet minstrelsy above Wilson's grave to-day.

But what matters it? His genius has made the world better. Somewhere his thrushes are singing in woodland and meadow, and the bluebirds will not forget their old haunts. Somewhere "the robin's breast of golden brown is trembling with an ancient tune." Somewhere an oriole is swinging in her nest, and somewhere at sunset the wood larks will say "Good night."

HELEN V. AUSTIN.

EVA'S EQUESTRIANISM.

EVA'S home is a modern farmhouse surrounded by orchards and groves of forest trees. Within its doors hospitality and goodwill abound. Eva is a sturdy little maiden of twelve years, a born naturalist, who knows from observation the habits of birds and bees, of crabs and frogs, and of all animals, whether aerial, creeping, aquatic or amphibious, that are to be found within the limits of her father's farm. In her "hunting expeditions," as she calls them, she discovers many thing both interesting and amusing, and the encyclopedia in the library decides for her all vexed questions. She does not disdain the usual occupations of maidens of her age, such as learning lessons, practicing music and "helping mamma," but in addition to these

accomplishments she can construct wonderful cottages of moss; she can catch crabs, searching them out in their homes by the brookside with unerring eye; she can tell you where to find birdnests innumerable, how many eggs are in each, their difference of color and marking, and the habits of the parent birds; the metamorphosis of wrigglers and polliwogs and caterpillars are familiar facts which observation has demonstrated. Snakes have no horrors for her. If she wishes to call upon the neighbors on a dark summer evening (the nearest one being one-eighth of a mile distant) her torch is a branch of the cat-tail willow dipped in kerosene. Indeed the girls who are pent up in crowded cities can form a very inadequate conception of the delights encompassed within a farm through which runs a babbling stream; and I am sure many of them would delight in the natural unrestrained expansion of faculties that gives to Eva her sturdy frame, her bright eyes and eager searching mind.

But Eva's chief exploit is her horseback riding. She cannot remember the time when she did not delight to visit the stables, and when her papa or the "hired man" would put her upon the back of the most venerable equine and walk solemnly by her side as the trusty steed made his circuit of the barnyard, her cup of happiness was full. Of late, however, she has done considerable riding without the service of a groom, but the only horse which she is permitted to use is Jim-old and slow and sure. Equestrianism is a curious art which cannot be readily mastered, and though Jim is sure, i. e., sure not to run away, he is equally sure to do whatever he pleases when there is no stronger hand than Eva's upon the rein. And why should he not? Has not Eva petted him and fed him sugar since she was a wee toddling mite that he could have crushed with his foot, and is he now to give up his will and go cantering over the country when it pleases him to go to the stable and eat oats? Ah no! Jim is too wise for that, and when he chooses to turn his head toward home Eva's ride is at an end.

It so happened that on a particular morning Eva was required to take a message to the nearest neighbor's, and throwing a blanket upon Jim (her riding is done without a side-saddle and therefore at great disadvantage) she started off. It was a bright summer morning and Jim was disposed to take suitable exercise. Eva drew up to the door, delivered her message to

Mrs. H-, and, as she was leaving the yard, decided to go on to the next house and speak with her friend Hattie. She therefore pulled Jim's head to the left, but he, having exercised sufficiently, turned obstinately to the right. Evidently he meant to keep his head toward home, and Eva was apparently powerless. comfited midget, poised upon the broad back of the powerful animal, called a halt to enable her to consider matters. was a maiden of many resources, and, knowing that from years of training, Jim would not fail to obey the word of command, however he might disregard her slight grasp of the bridle-rein, she determined to make him back down the road until she reached her friend's home. doubt Iim was somewhat puzzled, but he slowly backed himself down that long stretch of country road, guided by Eva's persistent voice, until finally the coveted council with Hattie was held. This being over, Eva, delighted at the success of her strategy, and disgusted with the obstinacy of her charger, chirruped "get up," and they proceded at a moderately rapid pace toward home, the horse's head now being first in order of advance, as is the normal manner of equine locomotion.

Eva and the few friends who know of this exploit indulge in considerable laughter over her unique method of progressing backward. She will soon be the happy possessor of a side-saddle, and no doubt will become, in future years, an accomplished equestrienne.

It is proper to say in closing that Eva is an enthusiastic member of the Audubon Society, and her name is on the subscription list of this magazine. It is easy to conjecture her astonishment as she reads this sketch.

MARY E. SHULTS.

CHARLEY'S WONDERFUL JOURNEYS.

JOURNEY XII.

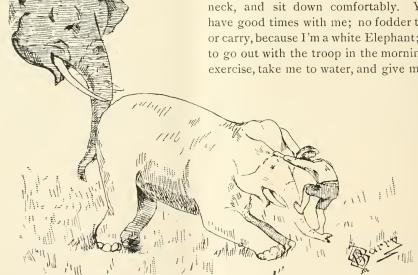
"J UST look," said the leading Elephant, as the whole troop came to a halt within a stone's throw of Charley, "there's a white or pinkish-colored boy, and if we manage carefully we shall be able to catch him, and break him in to attend to the little white Elephant."

"If you please," said Charley, stepping

"Yes, if you please," said Charley," I should like to try it very much."

"This is capital," said the little white

Elephant, "I never would let one of those black fellows ride me, but I don't mind you. Do you know how to mount? Just put one foot on the end of my trunk now I bend it —you may step on my foot first, I have no corns—take one ear in each hand, walk right up to the top of my head—so—now turn right round, and slide down on my neck, and sit down comfortably. You'll have good times with me; no fodder to cut or carry, because I'm a white Elephant; only to go out with the troop in the morning for exercise, take me to water, and give me my



"JUST PUT ONE FOOT ON THE END OF MY TRUNK AND TAKE ONE EAR IN EACH HAND,"

forward, and raising his hat, "I should like very much to have the little white Elephant to ride and attend to."

"Just listen to him," said the first speaker, as a grunt of approval ran through the whole troop. "Why, he talks as rationally as an Elephant. He may be able to teach all our men servants to talk, and if they are too stupid, he might help us learn their language. Are you willing to enter our service, and ride the white Elephant?" he asked of Charley.

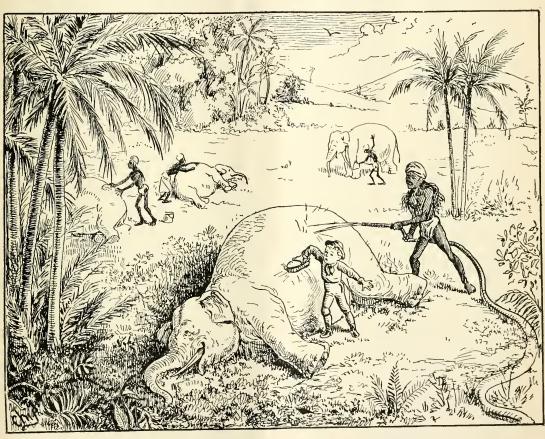
bath, and then keep the flies off the rest of the day. You needn't make any bread need he? (this to the chief Elephant). The man that bakes my cakes, can bake yours also."

Charley conceived a dim idea that the possession of a white Elephant might prove monotonous after a while, and that to be possessed by a white Elephant might be something still worse, and as the men kept silent all this time, the remarks made by the Elephants left Charley a little in doubt as

to whether they or the men were the masters, so he kept his mouth shut and his ears open.

The chief Elephant observing his silence attempted to range up alongside of him for conversation, but was checked by his rider, who misunderstood his intentions. "You

very intelligent, of course; men are intelligent beyond question. We can send them up to cut branches of the fig tree far out of our reach; they have a knack, too, of loading a day's supply on our backs so that we can carry it without its falling off; they plow the ground, too, and raise grain, and grind



"YES, THAT'S NICE," SAID HE, AS CHARLEY USED THE STIFF SCRUBBING BRUSH VIGORORSLY.

stupid brute," roared the Elephant, "can't you keep still? I've a good mind to pull you down and trample you under foot for digging that nasty iron into my raw spot."

The rider sat stupidly stolid, for he didn't understand a word of what was said.

"If we could only make them understand us," said the Elephant to Charley, "we could do something with them. They are it, and bake the flour into cakes; and they know how to draw water, and to wash and scrub us. In fact, without man we could never have reached our present state of civilization. But they try one's temper dreadfully sometimes, and if it wasn't that we can't do without them, I should sometimes be tempted to run amuck, trample the whole village under foot, and go back

to the jungles again. If we could only make them understand our language we could easily keep them in awe."

These remarks were received by a general grunt of approval.

"Didn't you always keep men to do things for you?" asked Charley.

"Oh, no," replied the Elephant, "we used to run wild in the woods, and do the best we could, and, of course, had nothing but trees to browse on; but we came to a sort of understanding with the men, that if we would come and protect them from the big cats, which they are so much afraid of, they would render us faithful service, but they are always trying to encroach, and assuming to be masters, or shirking their duties, but worst of all is their inability to learn our language. If we didn't learn something of their language there could be no communication whatever between us, and the aggravating thing is, that the more we learn the more we have to give in to their way of doing things, and with all their intelligence they are dreadfully self-willed creatures."

"There's a mosquito just behind you, boring into my shoulder," said the white Elephant to Charley, "I wish you'd flatten him. Here, this will make a nice whisk," he continued, as he pulled up a small sapling and drew it through his trunk to strip off all the leaves but the crown tuft, then biting off the root, he handed, or rather trunked it up to Charley, and instructed him to keep it going vigorously before and behind, as the flies were getting troublesome.

They soon arrived at a fig tree grove, and the men, knowing their duty, went up to chop branches while the Elephants browsed under the trees, picked up the fallen limbs, and placed them on their backs.

The white Elephant, having no load to carry, strolled from tree to tree, picking up the juiciest shoots, and occasionally reminding Charley of his duty, which, although not heavy, began at length to feel irksome.

The loading came to an end, the troop started for home, stopping to take in a liberal supply of water at a creek which they crossed on the way, went home and munched away at the fig branches while their cakes were being got ready and baked; the white Elephant got his daily ration or tribute of raw sugar, the cakes were all disposed of, Charley getting his ration with the rest, and after dinner the Elephants began to call loudly and impatiently for their bath.

"This is what I call the pleasantest hour of the day," remarked the white Elephant to Charley as he lay on his side with outstretched limbs after the first jet of water had been splashed over him. "I must teach you to handle the scrubbing brush nicely, for the worst of these black fellows is that if I tell them where it itches they don't understand. I may as well tell them my knee as my elbow. Yesterday it was itching inside my ear, and I kept telling the fellow, but it was no good. Then I flapped my ear until at last he understood; but really, you know, it looks so ridiculous, and signs are not like speech; how can you make signs to a man that you want him to scratch you between the toes?"

"Yes, that's nice," said he as Charley used the stiff scrubbing brush vigorously. "Now scrub the insides of my arms, and look carefully if there is any scurf in the folds of the skin at the armpits."

And so he went on giving his orders, and rolling over, and having more water spurted upon him until Charley was ready to drop. He made up his mind that he had had quite enough of white Elephants, and determined to escape as soon as night set in.

Perhaps the white Elephant had his suspicions, for while Charley was fanning him later in the day, he cautioned him to lie very close to him at night, because of the big cats which were prowling around all night, and which were big enough to eat him almost at a mouthful.

Charley shuddered, but all the same he

determined to escape, and when evening came and the white Elephant lay down, Charley pretended to be asleep and lay quite still until he heard him snore, then rising quietly he stole through the jungle to a clump of tall trees with dense foliage in which he might lie concealed and pass the night.

He gained the clump, selected one of the slenderest trees, and just commenced the ascent when he heard a rushing and a shouting from the direction of the camp; he began to climb as rapidly as possible, but before he could get far the white Elephant was upon him, and just succeeded in grasp-

ing him firmly by the ankle with the end of his trunk.

Charley clung to the tree with desperation, and the Elephant tugged with all his might, until Charley felt his strength giving way. Whatever put it into his head he does not know to this day, but at the critical moment, when his strength was giving way, he shouted, "Mother! mother!" with all the strength of his lungs.

"Charley, Charley, my darling boy!" came the prompt response, and Charley sprang up in bed with the pillow tightly clutched in his arms, and dropped it quickly to be folded in the embrace of his mother.

C. F. AMERY.

BIRD MIGRATION IN THE MISSISSIPPI VALLEY.

THIS interesting report, prepared by Prof. W. W. Cooke, with the assistance of Mr. Otto Widman and Prof. D. E. Lang, and edited by Dr. C. Hart Merriam, is the first fruit of the co-operative labors of the Division of Economic Ornithology of the Department of Agriculture and the Committee on Bird Migration of the American Ornithologists' Union. Every observer of nature is acquainted with the fact that although we have some birds native to the soil, birds that are always with us, and others which sojourn with us only in summer or winter, a great many of our familiar birds are only spring and fall visitors, birds of passage, which pause but a while for rest and refreshment on their long journey to and from their breeding grounds in the far North, and their winter feeding grounds in the tropics; but until now very little has been known of their rate of flight, the measure of its continuity, or of the relation of waves of migration to barometric pressure and temperature, on all of which points the systematic measures recorded in the present report have thrown clear light. One hundred and seventy observers, more

or less familiar with ornithology, were stationed at various points along the line of flight, and their recorded observations of the first and last appearance of each species, and of the flight of great waves of birds, afforded, on careful comparison with each other, fairly reliable data for determining the rate of flight of each species, and a vast number of facts in connection with the interesting phenomenon of bird migration. The report consists of two parts, (1) an introductory portion treating of the history and methods of the work, together with a general study of the subject of bird migration, including the influence of the weather upon the movements of birds, the progression of bird waves, and causes affecting the same, the influence of topography and altitude upon migration, and the rates of flight in the various species; and (2) a systematic portion in which the five hundred and sixty species of birds known to occur in the Mississippi Valley are treated serially, the movements of each during the seasons of 1884 and 1885 being traced with as much exactness as the records of the one hundred and seventy observers admitted of. Some of these observers had but an indifferent knowledge of ornithology, and as their records dealt wholly with questions of fact their returns were criticised closely before being accepted as facts. On this subject the editor, Dr. C. Hart Merriam, in his prefatory report says, "Here the editor has deemed it his duty to make the subject matter conform to the present state of knowledge on the subject. With this end in view changes have been made freely, and the portion relating to the geographical distribution of the various species and subspecies have been largely rewritten." This revision he tells us in a foot note "consisted in rewriting the habitats of most of the species and subspecies; in casting out some forms which had been included upon erroneous identification or insufficient evidence, in correcting statements of fact, in transferring (in a few cases) the notes sent under a stated species or subspecies to a nearly related species or subspecies," and a variety of other matter involving a vast amount of labor in which he acknowledges having received valuable assistance from Mr. Robert Ridgway, Curator of Birds in the U.S. National Museum. Indeed, as Dr. Merriam observes in his prefatory letter, there need be no hesitancy in expressing the belief that the present report is the most valuable contribution ever made to the subject of bird migration. It is only natural that a man of Professor Cooke's attainments while engaged in recording the facts of bird migration, should be tempted to speculate upon the causes of this remarkable phenomenon, and give the world the benefit of his conclusions. On this subject he says: "Without entering into a discussion of the causes which long ago started birds on their periodical change of habitation, we shall not be far out of the way in considering their present migrations the result of inherited experience. To be more explicit, the first migrations were doubtless very limited in extent, and probably were intelligent movements which, through repetition, became habitual, and the habit was transmitted from parent to offspring until it has become as we see it now, the governing impulse of the bird's life. It is undoubtedly true that love of the nesting ground, which is to them their home, is the foundation of the desire for migration; and year after year they find their way thousands of miles back to the same box or tree by the exercise of memory. Not always the memory of the individual, but the memory inherited from numberless preceding generations which have passed and repassed over the same route. * * * The return movement is obviously the result of two causes—the approach of winter and the failure of the food supply. * * * Nevertheless it is as yet unexplained why some birds, notably many of the warblers, retire in winter to such a great distance south, some even crossing the equator and passing several hundred miles beyond. Certainly neither cold nor hunger can be be the cause of such wanderings."

Dr. Merriam in his prefatory letter expresses himself as dissenting generally from Professor Cooke's theories, and one point in the theories above enunciated is so opposed to his views, that he has no hesitation is criticising it sharply in a foot note.

"I cannot concur," he writes "with Professor Cooke in the belief that love of the nesting ground * * * is the foundation of the desire for migration. In a lecture on Bird Migration which it was my privilege to deliver in the U. S. National Museum, April 3, 1886, I said "Some ornithologists of note have laid special stress upon the strong home affection which prompts birds to leave the south and return to their breeding grounds. To me this explanation is forced and unnecessary. Birds desert their winter homes because their food supply fails; because the climatic conditions become unsuited to their need, because

the approach of the breeding season gives rise to physiological restlessness and because they inherit an irresistible impulse to move at this particular time of the year."

There appears no ground whatever for the theory that love of the nesting ground is the foundation of the desire for migration-migration originated from the nesting ground, not to it-but there is no reason to doubt that birds are subject to a play of varied sentiments, and that along with the recognized necessity of migration on account of food supply and anticipated climatic changes, there is a pleasurable excitement such as we ourselves experience from anticipated change of scene and climate, whether those anticipations are based on old associations, as with the old birds, or are aroused in young birds by actual information, or by sympathy with the excitement of their elders, and the mere revisiting the nesting ground has probably a share in the pleasurable excitement aroused: but when Dr. Cooke theorizes about "inherited memory" we must confess ourselves at a loss to understand him. When he says that the memory which enables migrating birds to find their way to and from their summer feeding grounds "is not the memory of the individual, but the memory inherited from numberless preceding generations which have passed and repassed over the same road," he entrenches himself in depths in which we cannot venture to follow him. The faculty of memory is inherited, and may be strengthened from generation to generation by exercise, but the incidents or experiences of the birds of one age cannot be remembered by their descendants, by an effort of their own memory. At least there is nothing in human experience to warrant such a belief.

In fact, although some acts of both man and the lower animals must be characterized as instinctive, the old creed that the lower animals perform all their actions instinctively is steadily being replaced by the view that the lives of the lower animals are regulated by mental processes akin to our: and that although their reflective powers may be vastly more contracted, their faculties of observation are so immeasurably superior, that it appears safer to conclude that their mental faculties are equal to the apprehension of the conditions necessary to self-preservation, than to attribute their actions to so obscure and little understood a force as instinct.

BIRD LEGENDS.

A MONGST birds of good omen, the swallow occupies the most prominent position, and fully shares the popularity of the stork. In Swabia, swallows are called "God's birds," and in Silesia, "Our Lady's birds," because at break of day they twitter a song in her praise; while in the Ober Inn Valley, in the Tyrol, it is said that the swallows assisted the Almighty to construct heaven. At Maran they time their arrival and departure by the festivals of the Blessed Virgin. They appear at the

Feast of the Annunciation, and on the Eighth of September:

"At Mary's birth, The swallows fly off."

There is a general belief throughout Germany, that the house where they built their nests is blessed and protected from all evil. In the Ober Inn Valley people say there is no strife where swallows build, and in the Oetz Valley their presence makes a village wealthy, and prosperity departs with them. It is customary in

some parts of Westphalia to leave the windows open day and night in summer, in order that the birds may have undisturbed access.

In olden days, at the time when the swallows were expected, a solemn procession was formed by the whole household to the gate of the farm; then, at the first glimpse of the welcome visitors, the barn door was joyfully thrown open for them. It was believed that the swallows took a great interest in domestic affairs, and examined everything closely on their arrival. If they found untidiness and mismanagement, they sang:

"Boxes and chests were full when away we went, Now we are back, they are empty; all is spent."

Various ceremonies must be performed the first time of beholding a swallow. In the Neu Mark, the person must wash his face, to preserve it from sunburn during the year. In Tyrol, he must stop directly, and dig with his knife below his left foot; he will then find a coal in the ground which will cure ague. When the swallows have been constant to one nest for seven years, they leave behind them a small stone of great healing properties, especially for diseases of the eyes.

Tyrolese peasants of the Unter Valley say that the wondrous magic root which opens all doors and fastenings, may be obtained as follows: A swallow's nest is bound round with strong string, so as effectually to close the opening. Then the old swallow comes with the root, opens the nest, and lets the root fall. In another part of Tyrol the same story is told of the woodpecker.

The natives of Lippe Detmold have not quite such a favorable opinion of the swallows as their neighbors. They hold that no calves can be reared where swallows build; and in Westphalian villages one sometimes hears that a cow gives blood instead of milk, if a swallow chances to fly under her.

Killing a swallow is a crime which brings its own punishment; but the penalty varies. In the Pusterthal, Swabia, and the Lechrian, the slaver will have misfortunes with his cattle, for the cows will give red milk. At Nauders, in Tyrol, the criminal will lose his father or mother, and in the neighboring Telfs, "the heavens will open," i. e., it will lighten. In the Ober Inn Valley, the murderer's house will be burned down; and at Sarsans, in the Oetz Valley, the destruction or removal of a swallow's nest will cost the life of the best cow of the herd. The Westphalians say that the slaughter of a swallow causes four weeks' rain; and, if they are driven away, all the vegetables in the garden will be cut off by the frost.

Whoever bids farewell to the swallows at their autumnal departure will be free from chilblains through the winter.

Swallows also have the gift of prophecy. In some parts of Westphalia, the peasants tell you to look under your feet on the appearance of the first swallow, for if there should chance to be a hair, it will be of the same color as that of your future wife. A flight of swallows over a house in the Unter Inn Valley signifies a death.

The crossbill and the robin are likewise looked on as lucky birds. Everybody knows the pretty legends concerning both birds, and how the one is supposed to have crossed his bill, and the other reddened his breast, by endeavoring to pluck out the nails which fastened our Lord to the Cross. In Spain a somewhat similar act of piety is attributed to the nightingale and goldfinch:

"When Christ for us on Golgotha, Gave us His latest breath, The nightingale and goldfinch sang The mournful song of death."

In the Harz Mountains, and in Tyrol, the crossbill is highly valued, as it is believed that this bird will take to itself diseases which would otherwise befall the family. He has possessed this virtue ever since his efforts to release Our Lord from the Cross. The presence of a crossbill drives away gout and rheumatism, and even the water which he drinks, or in which he bathes, is used as a remedy for these complaints. Moreover, the Tyrolese crossbill counteracts witchcraft, and protects a home from evil spells and lightning.

The robin is likewise a protection against lightning, but woe betide the rash person who ventures to molest the robin or its nest. He will either be struck by lightning, or, as in the Zillerthal, he will become epileptic, or, in the Ober Inn Thal, his cattle will all give red milk, and even the water in his house will assume a ruddy hue. The despoiler of a robin's nest will lose as many relations in the course of the year as the number of young birds stolen. Absam and Schwaz are the only Tyrolese exceptions to the universal estimation in which this bird is held. At Absam it is said that the nest attracts lightning, and at Schwaz a robin flying over a house foretells a death.

The bullfinch also possesses good qualities. At Schwaz the water in which a bullfinch has bathed is reckoned a cure for epilepsy, and at Lienz nobody will suffer from erysipelas in the house where a bullfinch is kept.

In the valleys of the Unter Inn and the Lech the siskins are believed to have stones in their nests which render the owner invisible. It can therefore only be discovered by means of placing a pail of water beneath the tree where the nest is supposed to be located, and then the water will reflect it. According to the Bavarian peasantry the eggs and nest of the siskin have the same qualifications as the stone.

The tiny titmice were held in great estimation by our forefathers, and heavy penalties fell on any one who entrapped or otherwise injured them.

Starlings and other small birds often ap-

pear in legends as messengers of the deities, and prophesy accordingly. They speak a language of their own, and discuss the affairs of mankind; so that whoever understands their tongue hears many wonderful things. The starlings were especially considered to be the companions and messengers of the elves.

Among our chief songsters tradition relates the following superstitions regarding the lark, the blackbird, and the nightingale. The former is under the peculiar patronage of the Blessed Virgin. The lark commences singing at Candlemas, the Feast of the Purification. In former times it was considered a crime to kill a lark: but, on the other hand, if a child eats as his first meat the flesh of a roast lark, it will make him virtuous and pious. A rising lark is a good omen to the peasant as he enters the meadow and he calls it "the pious lark," because it never omits to praise and thank God before and after a meal. He who points at a lark is sure to be punished for his want of respect by a gathering on the offending finger.

The blackbird is sometimes called "Gottling," or "little god." It preserves the house from lightning, and also possesses soothsaying powers. If it sings before March, corn will be dear. Much information may be gained from its first spring carol by those who are learned in such matters. The Good Samaritans who feed the blackbirds through the winter months will be rewarded with prosperity in all their undertakings, and will never suffer from fever.

The Westphalian chaffinch at Iserlohn sings:

"Sük, Sük, Sük!

In the two and twentieth year,

In the two and twentieth year,

The Prussian soldiers will be here."

Probably this refers to some ancient prophecy.

THE AUDUBON NOTE BOOK.

AUDUBON SOCIETY.

THE registered membership of the Society at the close of November was 48,518, showing an increase of 472 during the month. These were drawn from the following sources:

New York	220	Maryland	3
New Jersey	24	Illinois	3
Massachusetts	53	South Carolina	I
Maine	3	Texas	4
Vermont	2	Indiana	I
Connecticut	17	Ohio	I
Rhode Island	6	Germany	2
New Hampshire	T	Switzerland	1
Pennsylvania	37	West Indies	76
Missouri	77		
			472

C. F. AMERY, General Secretary.

DISCONTINUANCE OF THE "AUDUBON MAGAZINE."

THE publication of the Audubon Magazine will cease with this issue, which completes the second annual volume. The AUDUBON MAGAZINE was started in the hope that by spreading a knowledge of birds and of their economic importance we should materially further the objects of the Audubon Society, but while the Society was established on philanthropic grounds and with the clear understanding that it would involve some cost to its promoters, it was hoped that the MAGAZINE would have been in such demand as to render it self-supporting. But after two years of effort in which we have been earnestly supported by a great many of the Local Secretaries of the Society, and notably by Mr. J. L. Davison, of Lockport, N. Y.; Miss Mary Bartol, of South Boston, Mass.; Dr. R. L. Walker, of Mansfield Valley, Pa., and Miss E. B. Barry, of Germantown, Pa., we have no such subscription list as is fairly remunerative for the trouble and expense involved in the publication of the magazine; we have consequently decided to suspend its issue with the close of the second volume. Our friends will bear in mind that we have maintained the Audubon movement at our own cost, and we shall gladly take all necessary measures for its continuance and spread, until the people are thoroughly aroused on the subject, but the MAGAZINE, although it has done some good, is not essential to the progress of the movement, and as its preparation calls for a great deal more labor than our busy staff can well devote to it, we have decided to discontinue it. We believe this decision will carry a feeling of relief to our many local secretaries who have exerted themselves to procure subscriptions, an uncongenial task at the best. For all good offices in this direction we desire to express our cordial thanks.

In all other respects the work of the Society will be conducted as heretofore, and printed supplies furnished free of cost as at present. The first and second volumes of the AUDUBON MAGAZINE, neatly bound in cloth, are for sale for one dollar each. The second volume will be ready this month. Subscribers who have kept their copies in good condition, can send them in and have them bound for fifty cents a volume. These two volumes include complete biographies of John James Audubon and Alexander Wilson, the two great pioneer naturalists of America; each monthly number has a bird portrait, reproduced from Audubon's world renowned plates, and the chapters on descriptive and economic ornitholgy contain an amount of interesting and instructive information about birds and their importance in the economy of nature, such as would be sought in vain in any other popular work on natural history.

We have received some advance subscriptions, which will be refunded as soon as we have leisure to go over the books.

MEMBERSHIP FOR DECEMBER.

THE membership of the Society reached 48,862 at close of December, 1888, and as the Society was inaugurated the 14th of February, 1886, we have still six weeks in which to attain to a membership of 50,000.

THE WOOD PEWEE.

THE wood pewee, (Contopus virens) is a common bird, and is a good representative of its class, the flycatchers. Its color is gravish-yellow beneath, and a rather dark olive-green above. The length of the bird is about six inches. In many ways it is a very interesting bird, and its soft musical call note makes it conspicuous among others. The note is very melancholy, and from it the pewee takes its name, for it sounds like pee-weee, drawn out in a plaintive tone, which renders it very pleasing. The nest is a pretty affair, and is placed in the forks of a limb, and covered with lichens, so that it looks very much like the wood and bark and often it is a hard matter to find it. It is composed of bark, dried grasses, and small twigs, held together with silk of cocoons, spiders' webs and fibers of plants. It is lined with dried grass, thistle down and small bits of bark, the whole being as nice a cradle as one could wish for. It resembles the hummingbird's nest, and, with its complement of three, sometimes four or five eggs, it is quite as pretty as the delicate nest of that bird. The eggs measure .70×.54 inch, and are cream color, dotted, especially at the larger end, with dark brown spots, some of which appear to be on and some under the egg shell. They are very pretty. The wood pewee is a very pugnacious bird, and I have seen him drive away numbers of goldfinches, and he will fight with the robin, though he invariably gets beaten in a combat with the latter.

AUDUBON MONUMENT COMMITTEE.

AT a meeting of this committee held on Wednesday evening, Dec. 2, at the house of Prof. Thomas Egleston, chairman of the joint committee, a very handsome memorial portrait of Audubon was exhibited, and a resolution passed to send out a copy to all subscribers of a dollar and upward to the



monument fund. This portrait is from Turnure's steel engraving of Cruikshank's painting, which is considered the best portrait of Audubon extant. Its issue will be confined solely to subscribers to the monument. Our readers will judge of the portrait from the reduced cut given.

Sohn I Australia

PENNSYLVANIA BIRD NOTES.

In October there came to the old pear tree before the door, three or four strange birds. They were probably travelers pausing for rest and refreshment. They were larger than a bluebird but not so large as a robin, but their breasts were just the color of a robin's breast. Their backs were black or nearly so. It was toward evening when they came, so we could not tell exactly the color of their backs. We used the glass, but they flitted about so we could not study them as closely as we wished. Their voices were like a blackbird's. They only uttered one note that we heard, a harsh chack chack. They flew away in a few minutes, and although we watched, hoping to see them again, they did not return.

In the latter part of August we saw a pretty sight, We were driving through a lonely wood road. As we ascended a rise of ground, there was a long low stone pile of a tumble-down rail fence. This fence was overgrown with bushes, and above all rose the forest trees. As we were driving slowly, we heard low sounds on the left, and looking toward the loose stones under the bushes, saw four full-grown partridges. Such pretty timid creatures! They had been sitting down, but rose as we looked. They moved a little very quietly, as if in doubt what to do. We were very close to them, and stopped the horse to see them more plainly. We could see the beautiful markings on their wings distinctly. They all spread their tails in the prettiest way, very much after the manner of fan-tailed pigeons. After moving about in this way a little while they all spread their wings and flew off among the trees. Whether they had young and were waiting for them to conceal themselves before securing their own safety, we could not tell. It may have been the reason.

I well remember the first partridge I ever saw. When quite a young girl I was walking through quite a piece of woods alone, when suddenly—from the solid ground it seemed to me—there sprang a creature, I hardly knew what. It flew around and around me, making a curious whirring noise, and it seemed to me that every feather was in motion. I stood speechless with astonishment and terror, when as suddenly the creature took flight and I was left to pursue my way unmolested. On relating my adventure at home, my father told me it was a mother partridge, who had made this demonstration to attract my attention while her young concealed themselves.

Sabbath morn a week ago, as we rose from the breakfast table, a great cawing was heard. On going to the outer door we saw a strange sight. There were hundreds of crows covering the large fields below the house. They were walking about rather quietly the greater part of them; but on top of a small tree close to the fence was perched one crow, occasionally flapping his wings. Three or four crows would arise from those in the fields, fly a short distance above this one cawing loudly, then return and others take their place. We watched them for some time. Whether it was a convention of crows or a court they were holding we had no means of knowing. Finally they rose in a great cloud and settled in two other fields near the road. Driving past soon after we saw them plainly. The bright sun shone on them and some appeared perfectly white and others a lovely silver gray as they stood in certain lights, but the most looked like black satin.

UPLANDS, PA. LUCY LYMAN PECK.

Women and their Victims.—It was hoped some time ago that the fashion of wearing the dead bodies as trimmings for bonnets and hats was going out. Such a hope, apparently, is doomed to disappointment. Perhaps the day may come when people who have a little regard for such helpless creatures as birds will give them up to their fate. It really seems of no use to try to protect them. The loafer from the East End of London goes forth with his cages and his lime, and catches them. He, however, mostly retains the male. The other bird murderer also goes forth on his cruel errand, and, by preference, catches and retains the female. * * What matters it to him that his victim is often the mother of a nest full of helpless young, and that they are left in the nest to die of starvation; to die while piteously crying out hour after hour for the mother that never comes? The mother birds are killed, and the young left to die of starvation, because certain women insist that it shall be so. Yet how gentle, and sympathetic, and tender those very women can pretend to be, when it suits their convenience. How correct and nice is their taste in everything that relates to good manners. How shocked they are by vulgarity; how horrified by coarseness. If they could see themselves exactly as some men see them; could have it once driven in upon their consciences, that, in the estimation of all rational and right-feeling men, they are incomparably inferior to many costermongers, crossing-sweepers, and untaught African negroes, they might for one moment pause and reflect upon their worthlessness. Is it really, then, come to this: That a nineteenth century woman is so utterly selfish, so hopelessly without brains or feeling, and so incapable of learning even the very elements of humanity, that she must and will have birds to adorn herself with at whatever cost? At bottom it really is want of intellect. The idle modern woman is so self-indulgent, pampered and spoilt, that she can no longer be counted upon to exercise a reasoning faculty. Impulses, whims and poutings alternate with fits of sulkiness or rage; and so she spends her life. The movement in favor of the emancipation of women, it may be hoped, will not only give enlargement, but a sense of responsibility and duty. No man can contemplate without the deepest anxiety the gradually increasing mental weakness among the prosperous. If the stern necessities of the poorer class of ladies develop in them true strength of mind and sternness of moral fibre, most people will think poverty and necessity blessings, though in disguise. Hardly any price is too great to pay for brains and a moral faculty.—*The Hospital*.

Ribbons and flowers are nearly the only trimming on hats and bonnets, according to our latest fashion books. It is pleasing to notice that few—in fact, scarcely any—birds are shown in them. Those ladies who keep up to fashion will therefore not have to wear birds and wings. In the hats and bonnets given in the following publications there is scarcely a bird to be seen: The Queen, Woman's World, Sylvia's Journal, Girls' Own Paper, Myra's Journal, Mrs. Weldon's Journal.—Newcastle Chronicle.

It is only fair to ladies to state that according to an observation at the West End, the wearing of bird skins is this winter almost entirely confined to shop girls and to servant maids, and from the tattered appearance of the skins it is obvious that they are only the "remnants" of the milliners' old stock, or the cast-off finery of mistresses. This spread of the fashion to the lower grades of society ought to surprise no one, and we have already anticipated its occurrence. Ladies should destroy their bird skins and not give them to their servants, or allow them to be sold to old clothes' collectors, who, of course, immediately put them in the market again—not, however, until they may have passed through an East End fever den, or become infested with parasites. The pity of it is that ladies introduced the fashion and we hope they are now beginning to see the cruelty and bad taste they have themselves been guilty of, and have caused in others, and feel thoroughly ashamed of themselves for allowing mere fashion to overcome their strongest instinct, which is for the preservation of life in every form.—Selbourne Magazine.

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CONTENTS FOR FEBRUARY, 1888.

A Green Woodpecker (Another of the early drawings of Audubon) Frontispiec	E.
Audubonian Sketches.—II. By R. W. Shufeldt	3
Hints to Audubon Workers.—IX. By Florence A. Merriam	6
SLATE-COLORED JUNCO; SNOWBIRD	6
Bluejay	8
Crossbills	ΙI
Charley's Wonderful Journeys.—VI. By C. F. Amery	12
The English Sparrow Discussed	15
Portrait of General F. E. Spinner	17
A Family on My Hands. By Violet S. Williams	18
The Audubon Note Book:	
Membership Returns	20
Ornithologists vs. Collectors	20
A Story of the Imagination.	2 I
A Young Ornithologist	21
Eminent People on Bird Protection	22

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Insect World, Figuier	I	50	setts; Summer; each vol	I	50

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CONTENTS FOR MARCH, 1888.

Rusty Grackle (Scolecophagus carolinus Müll))	. (After Audubon's Plate)FRONTISPIECE.
The Rusty Grackle	
Spencer F. Baird (With Portrait)	
Houses to Let. (Illustrated.) By C. F. Amer	
Hints to Audubon Workers.—X. By A	
	34
	35
	D
The Gnatcatcher's Strategy. $\mathit{By}\ \mathit{W}.\ \mathit{S}.$	Blatchley 40
The Audubon Note Book:	
	42
	42
· · · · · · · · · · · · · · · · · · ·	42
	43
	43
Eminent People on Bird Protection	44
Useful and Ente	
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CONTENTS FOR APRIL, 1888.

The mocking bird (Minns polygiones (Elini,)). (After Madabon's Line)
The Mockingbird47
Hints to Audubon Workers.—(APPENDIX.) By Florence A. Merriam 49
Charley's Wonderful Journeys.—VII. (Illustrated.) By C. F. Amery 53
The Audubon Monument. (Illustrated.) 56
Two Little Captives. (Illustrated.) By Etheldred B. Barry
Helpless Pets. By Helen V. Austin
By Albatross Mail
Bird Myths.—I. Corvus, the Crow. By Emily Thacher Bennett
The Audubon Note Book:
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CONTENTS FOR MAY, 1888.

The Night Heron (Nycticorax nycticorax næv	ius (Bodd.)).	(After Audubon's Plate)	FRONTISPIECE,
The Night Heron			69
Birds at the Bath. By Uncle Tony			71
Henry Bergh			
City Birds. By Harriette H. Boardman			75
How I Learned to Love and Not to			
Bird Histories.—The Cuckoo. By Emily 2	Thacher Benne	tt	82
A Plea for Our Birds. By R. F. Baxter			83
Some Characteristic Birds			85
The Audubon Note Book:			
Membership Returns			86
THE AUDUBON MONUMENT			86
FOR THE PROTECTION OF SMALL BIRDS			86
Nests			86
Audubon Work Among the Indians			87
Mr. De Young's Seagulls			

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Holden's Book of Birds, paper 25	Maine Woods; Early Spring in Massachu-	
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CONTENTS FOR JUNE, 1888.

Black and White Warbler (Mniotilia	aria (Linn.)). (After Audubon's Plate).FRONTISPIECE.
Black and white warbier	9τ
Alexander Wilson.—I	
Remarkable Birds. By George B. Griffith.	
The White Ant. (Illustrated.) By C. F. A	mery 96
	II. (Illustrated.) By C. F. Amery
	102
Bird Histories THE "BIRD OF LOVE"	By Emily Thacher Bennett105
	107
The Audubon Note Bock:	108
MEMBERSHIP KETURNS	
Chow AND And Chow	
No More Pipps in Powers	
AMONG THE RIPDS IN TRYAC	108
SEALS, SEA LIONS, SEA GULLS	109
THE MOCKINGBIRD AND THE SRARROW	109
Useful and Ent	
THE FOLLOWING WORKS ON NATU	RAL HISTORY ARE RECOMMENDED TO
THE FOLLOWING WORKS ON NATU. THOSE INTERESTED IN TI	RAL HISTORY ARE RECOMMENDED TO HE STUDY OF THIS SUBJECT.
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CONTENTS FOR JULY, 1888.

The Crow (Corvus americanus (Aud.)). (After	Audubon's Plate)FRONTISPIECE.
The Crow.	113
Alexander WilsonII	116
Birds of the Primeval World.—I. (Illus	trated)
The Audubon Knights. (Illustrated.) By	Etheldred Breeze Barry121
Gold Beauty. By Henrietta Christian Wright	125
The Audubon Note Book:	•
Membership Returns	126
Birds on the Increase	126
The Poet's Appeal	126
THE "MAGAZINE" AS AN EDUCATOR	126
Useful and Enter	
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	· · · · · · · · · · · · · · · · · · ·
The Pileated Woodpecker (Ceophlaus pilea	tus (Linn.)). (After Audubon's Plate), Frontispiece.
The Pileated Woodpecker	135
Alexander WilsonII	137
	139
	ustrated)140
	(Illustrated.) By C. F. Amery142
A Trip to the Yosemite Valley. By II.	S. M150
Birds in Disguise	
The Audubon Note Book:	•
ROBIN LOTHARIO	
Song of the Whippoorwill	
A TRUE INCIDENT	
•	
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CONTENTS FOR SEPTEMBER, 1888.

The Towhee Bunting (Pipilo erythrophthalmus (Linn.)). (After Audubon's Plate). Frontispiece.
The Towhee Bunting157
Alexander Wilson.—III
Bird Legends161
Queen Honey Dew. By Henrietta Christian Wright
Singular Birds. By G. B. G168
Arkansas Bird Notes
Shore Birds
The Audubon Note Book:
Membership Returns174
Bird Language174
Clever Birds174
Predatory Birds175

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Fork-Tailed Flycatcher (Milwulus tyrannus (Linn.)). (After Audubon's Plate). FRONTISPIECE.
The Fork-Tailed Flycatcher
Alexander Wilson.—V181
Charleys Wonderful Journeys.—X. (Illustrated.) By C. F. Amery
Man's Dependence on the Lower Animals. (Illustrated.)
The Song Sparrow193
Bird Legends
The Audubon Note Book:
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CONTENTS FOR NOVEMBER, 1888.

The Kingbird (Tyrannus tyrannus (Linn.)). (After Audubon's Plate)FRONTISPIECE.
The Kingbird201
Alexander WilsonVI204
Reintroduction of Feather Millinery207
The Stork. (Illustrated.) By J. J. Sprenger
Sketches of Montana. By "Yo."214
The Audubon Note Book:
Membership Returns218
AN INTELLIGENT CROW218
A WAYWARD PET ROBIN218
BIRD STRATEGY
Albino Bobolink219
THE LOON IN CAPTIVITY
Eminent People on Bird Protection220

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CONTENTS FOR DECEMBER, 1888.

The Tufted Titmouse (Parus bicolor (Linn.)) (A	fter Audubon's Plate)FRONTISPIECE.
The Tufted Titmouse	223
Alexander WilsonVII	225
The Wounded Redstart. By Emma Thornton	
Charley's Wonderful Journeys.—XI. (Illustra	ated.) By C. F. Amery232
Report of Dr. Merriam	237
The Birds of Prinkipo Island	238
Bird Legends	239
The Audubon Note Book:	
Audubon Society	· · · · · · · · · · · · · · · · · · ·
AUDUBON MONUMENT	240
"CHARLEY'S WONDERFUL JOURNEYS"	240
"BIRD PORTRAITS"	240
To the Young Members of the Audubon Society	240

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CONTENTS FOR JANUARY, 1889.

Hermit Thrush (Turdus aenulaschkæ pallasii (Cab.)). (After Audubon's Plate)Frontispiece.
Hermit Thrush245
Alexander WilsonVIII247
Winter Birds in Vicinity of Dunstable, Mass. By C. W. Swallow249
The Grave of Alexander Wilson. By Helen V. Austin251
Eva's Equestrianism. By Mary S. Shults252
Charley's Wonderful Journeys.—XII. (Illustrated.) By C. F. Amery254
Bird Migration in the Mississippi Valley257
Bird Legends ²⁵⁹
The English Press on Feather Millinery264
The Audubon Note Book:
Membership Returns
Discontinuance of the "Audubon Magazine."
Audubon Monument Committee262
Membership Returns for December263
Bird Notes from Pennsylvania
The Wood Pewee

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EMINENT PEOPLE ON BIRD PROTECTION.

OAK KNOLL, Danvers, Mass., and mo., 20, 1886.

Editor Forest and Stream:

I heartily approve of the proposed Audubon Society. We are in a way to destroy both our forests and our birds. A society for the preservation of the latter has long been needed, and I hope it is not too late for the accomplishment of its objects.

I could almost wish that the shooters of the birds, the taxidermists who prepare their skins, and the fashionable wearers of their feathers might share the penalty which was visited upon the Ancient Mariner who shot the Albatross. Thy friend,

JOHN G. WHITTIER.

BROOKLYN, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I am heartily in sympathy with your purposes for the protection of birds, and should be glad to contribute any influence that I can to that end.

If there were no purchasers there would be no demand, and no reason for slaughtering these winged gems. But as only women create a demand, it rests upon them to stay this wanton destruction. I am sure that it is only necessary to bring before American women the cruelty of this "slaughter of the innocents" that fashion is carrying on, to secure a renunciation of this ornament and the salvation of birds.

On this subject the kind feelings, the taste, and æsthetic sympathy of the whole community are on your side, and if you persevere you will surely win.

HENRY WARD BEECHER.

CORNWALL-ON-HUDSON, N. Y., Eeb. 22, 1886.

Editor Forest and Stream:

You have indeed my hearty sympathy in every effort to prevent the slaughter of my innocent little neighbors and friends, the birds. In the destruction of forests and birds, the people of this land are inviting very great evils and inflicting wrongs on posterity which scarcely can be measured. The press should render it impossibe for women to sin thoughtlessly and ignorantly in demanding little birds for their adornment. The evil should be brought home so fully to the knowledge of all, that the continued wearing of our useful little birds should become the badge and indication of a callous, vulgar nature. You are doing a humane and patriotic work in exciting public aversion to one of the most cruel and stupid wrongs of the age.

Respectfully yours,

EDWARD P. ROE.

WEST PARK, N. Y., Feb. 20, 1886.

Editor Forest and Stream:

I scarcely need assure you that your undertaking to form a society for the protection of our wild birds against the ravages of the milliners and the sham scientific collectors has my warmest sympathy and approval. It is a barbarous taste which prompts our women and girls to appear upon the street with their head gear adorned with the scalps of our songsters; and it is mere vanity and affectation which prompts so many persons to make up cabinets of the nests and eggs of the same. The destruction of our birds from their natural enemies is immense, and this craze of the collectors, and folly of the milliners and their customers in addition, threatens their serious diminution.

I hope you may succeed in creating so strong a public sentiment upon the subject that the collectors of skins and eggs for the unworthy purposes of fashion or to indulge the vanity of pseudo-naturalists may suddenly find their occupation gone.

Please add my name to the list of the members of the AUDUEON SOCIETY. Very sincerely,

JOHN BURROUGHS.

160 W. 59TH STREET, \ NEW YORK, Feb. 20, 1886. \

Editor Forest and Stream:

No one who will take the trouble to give the matter a few moments' serious consideration can be in doubt, I think, as to the wisdom of organizing the AUDUBON SOCIETY, and I am thankful that such a step is contemplated. There is an element of savagery in the use of birds for personal decoration, which is in grotesque contrast with our boasts of civilization. But even the savage stops short, as a rule, with the feathers. It is only Christian people who think it worth while to butcher a whole bird to adorn their head gear. I am sure, however, that this is largely from that unreflecting habit which is a leading vice in people who follow the fashions. But it is a vice; as Hood sang, when he wrote—

For evil is wrought
By want of thought
As well as by want of heart.

If the Audubon Society can teach men, and especially women, to think on this subject, half of the battle will have been won. Henry C. Potter.

ANDOVER, Mass., Feb. 21, 1886.

Editor Forest and Stream:

I am in earnest and indignant sympathy with the motive of any society organized to prevent the murder of birds for decorative purposes.

E. S. PHELPS.



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DURING the past year we have had a great deal of valuable assistance from young members in canvassing for subscribers for the Audubon Magazine, and although Audubon boys and girls are enthusiastic in the cause of bird protection, and of course know that virtue is its own reward, we have no doubt they will be just as pleased as other boys and girls to get some substantial token in proof that their efforts have been appreciated. We have accordingly determined to present every member who has sent us ten subscriptions and upward during the past year, with a free copy of the Audubon Magazine for a year, or the Society's silver badge, or any book in List I. below, as they may elect. Collectors of twenty subscriptions are entitled to select any book in List II., or they may select a book from List I., together with a badge or a free copy of the Audubon. Collectors of thirty subscriptions are entitled to select any book in List III.; of forty subscriptions any book in List IV., and the collector of fifty subscriptions any book in List V. This system of giving prizes having been initiated, will be permanently continued. Any member sending in ten subscriptions during the coming year, may claim a prize immediately, or may let the account go on until entitled to a book in the second or any higher class. The subscriptions may be sent in at any time during the year, but with the first installment the canvasser must advise us that he is trying for a prize.

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Table 1 Section 1 Section 1 Section 1 Section 1 Section 2 Section

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