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# THE OOLOGIST.

Monthly. 50c. per Year.

Vol. VII, ALBION, N. Y., JAN, 1889. No. 1

## Exchanges and Wants.

Brief special announcements. "Wants." "Exchanges" inserted in this department for 25 cents per 25 words. Notices over 25 words charged at the rate of one-half cent per word. No notice inserted for less than 25 cents. Notices which are merely indirect methods of soliciting cash purchasers cannot be admitted to these columns under any circumstances. Terms, cash, with order.

THE OOLOGIST "works wonders". From my little Ex. notice in Dec. No. I received an answer by same mail that I received the "Oologist" Every mail brings reply's from the East, North, South and West. I can't speak to highly of it as an advertising medium. Resp't. Yours, GEO. L. WHITE, Mt. Morris, N. Y.

CURIOS wanted for my museum. SEEBACH Peru, Ills.

Bird Skins, Eggs, War Relics. (sabres), Microscope, Curiousities. Books on Ornithology, Indian Relics, Tambourine, Carinas etc., to exchange or Type, etc. JOHN O. SNYDER, Waterloo, Ind.

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Wanted to exchange or sell Chinese coins and second class eggs. will exchange or sell eggs at half price. Only first class eggs taken. Lists exchanged. CHAS. H. CULP, Gilroy, Cal.

TO EXCHANGE OR SELL.—A first-class collection of Birds Eggs of 10 variety, including Cerulean Warbler, Ostrich, Ruby Throated Humming bird, and others, for particulars address H. L. MERRITT, Box. 116, Chatham, Ont., Canada.

WANTED.—The following first-class Eggs in original sets with data. White Ibis, Glossy Ibis, American Osprey, Turkey Vulture, Black Vulture, Night Hawk, Bartramian Sandpiper. E. G. TABOR, Meridian, N. Y.

TO EXCHANGE.—A collection of eggs in sets with data, 69 kinds worth \$25-00, for a Winchester repeater, must be in good condition and either 44 or 45 - 90 cal. L. N. ROSSITER, Lake Forest, Ills.

THE LIMPkin.—Set of four with data to exchange for best offer of sets or large singles. CHAS. TURTON, 1240 Flower St., Los Angeles, Cal.

TO EXCHANGE.—Specimens of Natural History for same. Dealers in above will send catalogues to Society of Natural Sciences. 330, W. Marshall street, Norristown Pa.

WANTED.— TO PURCHASE COLLECTIONS OF INDIAN RELICS AND OTHER CURIOSITIES FOR WHICH CASH WILL BE PAID. PARTIES HAVING SUCH FOR SALE WILL PLEASE CORRESPOND WITH W. H. KING, JACKSONVILLE, ILLS. ayt

WANTED—Reliable collectors in the United States and Canada, to collect for me. liberal cash commission guaranteed. Write for particulars. FRED W. CURTIS, Wauwatosa, Wis.

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EXCHANGE NOTICE.— First - class singles (A. O. U. Nos.) of 4, 13, 160, 172, 203, 264, (271), 339, 342, 351, 369, 378, 394, 452, 474b, 512, 595, 631, 731 had others equally desirable, for first class singles, listed at not less than 30c each. (1890 List) or for full sets of first class eggs with complete data, of the most common species, send lists. All correspondence answered. WILL A. MOORE, Box. 661, Norwalk Ohio.

American, European and Exotic Butterflies and Moths for cash and in exchange for Birds' Eggs, Birds' Skins. All mounted and perfect. Very rare and beautiful specimens from India, Africa and South America; also live cocoons from India and Europe to exchange for others of this country Send for catalogue. PROF. CARL BRAUN, Naturalist, Bangor, Me.

WANTED the following sets all first-class with complete data: 1 $\frac{1}{2}$ , 7 $\frac{1}{2}$ , 27 $\frac{1}{2}$ , 41 1-6, 67 1-7, 164 $\frac{1}{2}$ , 197 1-5, 211 1-5, 244 $\frac{1}{2}$ , 254 1-5, 260 $\frac{1}{2}$ , 263 1-5, 277 $\frac{1}{2}$ , 278 1-5, 304 1-5, 312 1-5, 321 $\frac{1}{2}$ , 326 $\frac{1}{2}$ , 351 $\frac{1}{2}$ , 388 $\frac{1}{2}$ , 431 1-5, 492 $\frac{1}{2}$ , E. S.  $\frac{1}{2}$ , 656 $\frac{1}{2}$ . In exchange for every \$1 worth of the above sets I will give \$3 worth of the following first-class singles. Cala. Shrike, Green backed Goldfinch, Western Lark Finch, Heerman's Song Sparrow, Parkman's Wren Red-eyed Vireo, Brewer's Blackbird and Roadrunner. M. L. WICKS, JR., No. 1, So. Hill St., Los Angeles, Cal.

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Live collectors will not be long in observing the importance of keeping their names standing in this Directory. Collectors and dealers desiring to make sales, purchases or exchanges will not only write to the parties whose names appear in this directory for their wants, but will also keep them posted on "bargains" that they may have for sale cheaply, publishers having papers etc. that would be of interest to the persons whose names appear in this Directory, will recognize the importance of placing notices etc. in the hands of *live* collectors and will act accordingly.

Collectors receive as high as 25% Letters, Circulars, Samples etc. from having their names inserted one time at a cost of only 10 CENTS in this Directory.  
Address, THE OOLOGIST, ALBION, N. Y.

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Haverhill, Mass.  
Will A. Moore, Box 661, Norwalk, Ohio.  
John B. Seymour, New Berne, N. C.  
Chas. E. Cram, No. 410 Jefferson St.,  
Burlington, Iowa. [J3  
H. W. Davis, North Granville, N. Y. [y

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NATURALIST,

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OUR  
**X-MAS**  
OFFER.

In December OOLOGIST has proven a great success and we have concluded to extend a portion of it for 30 days longer, viz:

Having a large surplus of the eggs of the species advertised in the December OOLOGIST, we will till orders until Feb. 15, at the following low rates: For \$1.00 we will send you eggs, your selection to that amount, and THE OOLOGIST for 1890.

For \$2 you can select to the amount of \$3.

For \$3 you can select eggs to the amount of \$5.

For \$5 you can select eggs to the amount of \$10.

Our stock of many species will no doubt become exhausted at an early date in which case it is desirable to name a second choice in case we cannot furnish the ones you mostly desire.

Orders under 50 cents must contain 5 cents additional for return packing and postage.

All specimens post-paid at our expense, and should loss occur through breakage we will stand *half*.

**SPECIAL NOTICE**

The following species we withdraw from the offer as our surplus has already been disposed of:

- Ridgway No.s—729, 696, 698, 660, 661, 681, 694, 646a, 620, 628, 593a, 580x, 558, 514, 473b, 474, 475, 434, 436b, 439, 442, 414, 420, 425, 360, 353, 280, 283, 179, 213, 240b, 26, 19, 53, E. T. S., and all foreign eggs.

Address very plainly,

**Frank H. Lattin,**

Albion, Orleans Co., - - - N. Y.

## Notes on Florida Birds.

When in Florida last winter, I met with a great many birds under circumstances very favorable for studying them, especially when camping on the Indian river. An account of the whole trip might be interesting, but, brief as I could make it, it would fill the whole of several numbers of the OOLOGIST and would not be confined to ornithology and oology alone, but would have to contain something about camping, boating, adventures with animals, reptiles, insects, etc.; so I must leave the space which it would take, for articles of more value; but I will try from time to time, to give brief notes of some of the more prominent birds.

1. Florida Jay, (*Aphelocoma floridana*.) The Florida Jay is found in larger numbers on the Indian river than in any part of Florida. Prof. Maynard took five sets of eggs in one season near where I was camping, which was a pretty good find, considering that the bird builds in a tangled thicket. I saw a Jay fly into an orange tree one day and immediately shot him. Glancing into the tree, I saw a nest there made of sticks and looking very much like a Jay's nest. It took me about ten seconds to climb into that tree and stick several sharp thorns into my legs, only to find it an old nest of what kind I do not know.

The Florida Jay is a handsome bird with his metallic blue and ashy gray coat, and I do not think he is quite so mischievous as his notorious relative, the Blue Jay; but I have not had the opportunity to study his habits that I have had of those of the Blue Jay, and perhaps if I saw him skirmishing through the woods and eating up the eggs and young of servicable birds, I

might have as bad an opinion of him as I have of *Cyanocitta cristata*, and *Corvus americanus* are the two birds which I dislike, for I have seen them rob the nests of smaller birds, like the tyrants that they are. Again I have seen them unmercifully henpecked by Kingbirds, Red-wing Blackbirds and even Sparrows for trying to break up their homes.

There is scarcely a bird in South Florida, save the Grackles, as tame as the Jays. They will come into a house, and although there may be several persons in the room, will hop around as freely as if they were in the woods out of sight of a human being. At one grove I saw Jays so tame that they would eat out the hand of Mr. Sackett, the owner of the grove. They make great pets, he says, and he thinks a great deal of them, for they are lots of company to him, his nearest neighbor being several miles away, and with their lively notes and gay plumage and manner, they are a source of much enjoyment to him, as they would be to anyone who would treat them as friends and not as mere specimens fit only for the cabinet.

2. Turkey Buzzard, (*Cathartes aura*.) This bird is protected by law in Florida far better than the deer, for venison is exposed for sale in the open markets there during the "close" season, while who would think of hanging up a Buzzard in his market at any season? Public opinion is on the side of the Buzzard, as it should be, for without this invaluable scavenger, life in the tropics would be decidedly unpleasant.

Buzzards are seldom shot, and during the time I was in Florida, I neither shot at nor killed one, although I could have killed fifty or more without going a step out of my way.

Buzzards are by no means bad looking when you see them sailing in the sky, but I am not desirous of a very close acquaintance with them until they change their diet. One day I left an alligator that I had shot on the banks of the Banana creek, as I wished to get the teeth when they got loose enough for me to get out. Going past there a few days later, as many as forty Buzzards were around it enjoying themselves immensely, gorging themselves, as they were, with his putrid flesh. But who does not want the Buzzard to enjoy himself, when in doing so, he does all mankind a priceless favor?

3. American Coot, (*Fulica americana*.) Coots were everywhere and in countless legions. So thick were they that I do not doubt a story told me by the person who shot them, to the effect that he picked up seventy-six Coots after firing into a flock of them, and there was as many more dead ones floating in the water, which he did not pick up.

All through the Banana creek, twenty miles long and from one-half to one mile in width, the water was literally black with Coots, and they are so tame that they only get away from a boat when it gets very near. It is interesting to watch the Coots, especially when they are feeding, when they cannot reach the grass on the bottom of the river without diving, they dive down head first, but come up tail first in a most comical manner. They make sailing hard though, for they do not eat all of the grass they pull up, and it floats in the water, making fast sailing next to impossible. I was sailing across the Banana river one day under reefed sail with the water so rough that every wave threatened to swamp us, and the wind blowing almost a gale, when a number of Coots were on the water, unable to rise on account of the waves, which were so high that they could not run along on the water but a yard or

two without pitching into one, which they did not seem to relish. They would dive when about four feet from the boat.

The Coots in some places on the river were very tame and in other places quite wild. One night when we were camping on the Banana creek, five miles from the nearest house, a flock of Coots numbering many thousands, came in very close to the boat, seemingly out of mere curiosity. They were so close together that they looked like one solid mass, and as far as the eye could see the Coots were so thick that you could not see the water for them. Various kinds of Ducks were flying over, so thick as to darken the sky, and making a whining, whistling roar, which has to be heard to be appreciated. At such a time a shot in any direction is sure to make sad havoc, and if the pot hunter could find a market here for his game I should pity the poor birds. But as it is, comparatively few are killed, and they are nearly all eaten. Wild animals kill some, and Bald Eagles frequently attack them. They usually show fight, however, when attacked by Bald Eagles, and, closing up into solid ranks, give him a shower bath, much to his disgust. They say it is dangerous to eat directly after bathing, which I suppose is the reason that Mr. Baldhead does not give the Coots further trouble.

But in order to get a good idea of the immense numbers of Coots found in Florida in the winter, or to study their habits, one must visit the Indian River.

4. Bald Eagle (*Haliaeetus leucocephalus*.) On any clear day if you glance upward, the chances are that you will see one or more Bald Eagles, or "Baldheads." They are very common but very wild and hard to shoot. Their food consists of fishes, (which they do not always get by honest labor) and birds; in their season mostly Ducks and Coots, with some rabbits and other

small animals. Bald Eagles may be distinguished from Fish Hawks, which they so much resemble, easily, by their white heads, which show up very conspicuously even though a long distance off. They nest abundantly along the Indian River, and Prof. Maynard says that he has never found a nest from which another nest was not visible.

They build in pine trees, and their nests, which are made of sticks, are about as large as a tip cart, and usually difficult of access. They lay their eggs as early as January, sometimes even in December, and try to raise one brood of two young ones each year.

Prof. Maynard caught a pair of young Baldheads one year when he was camping at Mr. Sackett's grove on the Banana Creek. He had them around camp when they got large enough to get around pretty fast, and one day one of them was missing, for which Mr. Maynard offered five dollars reward. A few days later Mr. Sackett spied young Baldhead on the ground, not far from his house, and putting both hands together very much like a boy would in attempting to catch a ball, he made a grab for the Eagle. But Baldhead made a grab for him at the same time, and caught him by the knee with one claw, while with the other he caught both thumbs. Mr. Sackett was in a pretty fix. He could not get hold of the Eagle to choke him as both hands were held, so he tried to bite his claw and thus get his hand free. But the Eagle, instead of letting go, immediately caught him by his mouth, holding him as in a vise and all doubled up. He had to stay in that uncomfortable position until Mrs. Sackett came and cut the Eagle's head off.

5. Gray Snipe (*Macrorhamphus griseus*.) I found these to be very abundant along the west bank of the Banana River, and, unlike the Wilson's Snipe, which I found there also, they fly in flocks. I saw a large flock light on the edge of the river one day, and

by making a detour and creeping up, we succeeded in getting about half a bushel of them in five successive shots; Now don't think I was slaughtering these poor, innocent birds—kind reader merely for the love of killing, for every one of them was eaten—even to a plate of them which we had all cooked for supper, and a wild-cat, possum or something stole and ate up.

Mingling with the Sulpe might be seen an occasional Killdeer, and Pectoral Sandpipers also seemed to be fond of their company; Yellow legs did not associate with them, but would shirk for themselves along the shore; either singly or in small parties.

The Gray Snipe, like the Wilson's Snipe and most all shore birds, is a green looking bird with its long legs and longer, soft tipped bill well adapted to the use it is applied. Its whole frame seems to be on as long and slim a plan as possible, which gives it an appearance, when flying, of being a large bird—and it is large according to measurements—which is changed to an appearance of being a very small bird when it is skinned or plucked. But it makes up in quality what it lacks in quantity, for though small. A number of them make a very good meal for the hungry collector.

CLARENCE W. ROWLEY,  
Ellis, Mass.

### Ornithology and Bicycling.

I think the most healthful, instructive and pleasing exercise one may take, is to roam in the country, through forest and meadow, and over brook and stream, in pursuit of the study of birds; and I think the second most healthful and pleasing exercise is bicycling; aside from walking, there is no exercise that puts every part of the body so in motion as does bicycling; and I venture to say that there is no exercise that so builds up the muscle; and now combin-

ing these two pleasures, we have a sum, total of happiness and health.

I had been an earnest student of birds for a number of years, when I became the owner of a bicycle. Then my next study was to learn how I could best work my wheel in with my ornithological studies; and it was not so very difficult a problem.

How often has it been the experience of the collector, that he has hastened at early morning, to some distant woods or glen, which he knows to be rich in oological treasures and reaches there only to see by his watch, that so much time has been consumed on the way that he has but a few moments here before he must hasten back, and so is obliged to return disappointed. With the bicycle this is overcome to a goodly degree.

One of my favorite spring time rambles is to mount my wheel at 4 or 4:30 a. m., with rubber boots on, (imagine a bicyclist in rubber boots,) and with my collecting box strapped to the bundle carrier, and ride out into the country some three miles to a certain swamp; here I lock my wheel to the fence and have whole hours to mys if and the birds before I need worry about getting home to breakfast.

I imagine the readers of the OOLOGIST would be somewhat amused if they were to see me riding into town in the morning, just as the pleasant odors of breakfast begin to stir themselves, arrayed in old clothes and rubber boots, with perhaps a bird's nest or two, tied to my wheel; when I do reach the breakfast table, it is with no invalid's appetite I assure you. And after breakfast when everyone is hurrying to their business, I doubt if there is anyone among them who feels any more like a day's work than I, myself.

It was my pleasure during the past summer, (1889,) to take an overland bicycle tour through Orleans, Genesee, Wyoming, Cattaraugus, and Chautau-

qua counties to Chautauqua Lake, returning along Lake Erie by the way of Buffalo; and during the trip my ornithological note-book was in the handiest corner of my handiest pocket, and was used even oftener than my oil can.

I kept a careful record of all the birds I saw, and considerably enlarged my ornithological knowledge, although ornithology was by no means the object of my trip.

One afternoon in particular, I shall not soon forget, I was riding along the road between Sandusky and Franklinville, in Cattaraugus Co., heated and dusty, when, turning a bend in the road, I reached a miniature Rip Van Winkle glen, where the road ran along side of a woods. Dismounting, I seated myself on a hummock of earth in the cool shelter of the grove, and soon found that the birds, as well as myself, were aware of the beauty of the place, for the grove was full of bird music. Here were Thrushes, Tanagers, Warblers, and many strangers. Indeed I could have spent the rest of the day there if I were not so far from a night's lodging; but that little grove of birds I shall not forget.

Now in conclusion, as a proof of the value of a wheel to the ornithologist, I can point to many a valuable set of eggs and many a curiously constructed and pretty nest now in my collection which would not be there had it not been for my faithful steed of steel and nickel.

To be sure his back one is somewhat curved and his ribs show decidedly, but notwithstanding this, for his assistance to me in my ornithological studies; I would not part with him for twice his weight in dollars.

NEIL F. POSSON,  
Medina, N. Y.

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The Audubon Ornithological Club.

[All letters of inquiry and communi-



ications relating to the club should be addressed to the secretary, J. M. Howard, 284 Marshfield Ave., Chicago, Ill.]

The Audubon Ornithological Club was organized in October, 1888, when several of the young men in the neighborhood met and adopted a constitution and by-laws, and elected the following officers: President, E. F. Walker; secretary, A. M. Cox, and curator, J. M. Howard. By the following year, very little had been done except to revise the constitution and by-laws, and become acquainted with each other. We found ornithologists, indeed, to be "few and far between." Several active and a number of corresponding members were admitted. In October, 1889, the first annual meeting of the club was held, when important business was transacted and the following officers were elected; President, A. R. Hager; secretary and treasurer, J. M. Howard; curator, A. M. Cox, and librarian, C. A. Jones. A collection and library has been started, and the club is on a fair road to success.

The OOLOGIST is the official organ of the club, and should be ordered by every member. It will contain notes and items of interest as well as the more important papers.

May 6, 1889, A. M. Cox shot a full-plumaged female Blue Grosbeak about half a mile west of Chicago. They are considered accidental visitors in this part of the state.

We are sorry to hear that the splendid collection of H. K. Coale (numbering about fifteen hundred specimens) has been sold to the British Museum. It should have been obtained by some museum in this country; at least as such a chance does not run along the road every day waiting to be picked up.

### Pine Siskin.

On November 23d, a cold, moist morning, I had the pleasure of recording a visit from those erratic little fellows, the Pine Siskins. While on my way down street, my attention was attracted by the "tsee-a-daing" of three Goldfinches as I thought at first, which came undulating overhead and alighted in an evergreen in a near by door-yard.

Approaching the place, I soon found no difficulty in identifying the characteristics of our little erratic winter visitor, the Pine Siskin, for such they were.

The crowd of three soon took wing and disappeared to be gone perhaps for a year or more.

NEIL F. POSSON.

Medina, N. Y.

### From Michigan.

Up to the middle of last week we have had a great number Nuthatches, Woodpeckers, Kinglets, Yellow-rumps and various sparrows with us. The weather was very warm, and I was somewhat surprised one day to find that they had all disappeared, seemingly, without cause. Two days after a storm set in which lasted two days, and which left the snow over a foot deep. I merely cite this as an illustration of the wonderful instinct of our feathered friends.

The Slate-colored Juncos arrived here Sept. 30; a very early date. Passenger Pigeons have been more common in this county than for some time heretofore. I have seen two flocks of about twenty each, and have heard of one containing sixty. On Mackinaw Island I shot a specimen of the rare Connecticut Warbler, Aug. 30.

STEWART WHITE,

Nov. 30.

Kent Co., Mich.

# THE OOLOGIST

EDITED AND PUBLISHED MONTHLY

—BY—

FRANK H. LATTIN, - ALBION, N. Y.

Correspondence and Items of Interest to the student of Birds, their Nests and Eggs, solicited from all.

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Single Subscription, - - - 50c. per annum.  
 Sample Copies, - - - - - 5c each.  
 The above rates include postage and premium.

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Single insertion, 20 cents per line, nonpareil.

	1 mo.	3 mo.	6 mo.	1 yr.
Five lines,	1 00	2 50	4 00	6 00
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FRANK H. LATTIN,

ALBION, Orleans Co., N. Y.

Entered at the Post Office at Albion, N. Y., as second-class mail matter.

## Florida Field Notes.

Mr Willard Eliot, Thomotosassa, Fla., sends us his Field Notes for 1889, from which we take the following:—

March 1st. Wood Duck; found a nest in a natural cavity in a live pine tree 50 feet up, as I had no climbers I could not get to the hole.

March 22. Loggerhead Shrike; took a set of five fresh eggs, the nest was in an orange tree 8 feet up, made of crab grass and sticks lined with green maiden hair moss gathered from the dead pines near by.

March 29. Went to an old field full of dead pines climbed to a Flicker's hole 40 feet up and found a Fla. Screech Owl sitting on one fresh egg. Also found a Brown-headed Nuthatch nest in a pine snag containing two eggs and

three young and on my way home took a fine set of three eggs of Fla. Screech Owl from an old Flicker's hole 8 feet up, the eggs were laid on rotten chips and a few dead oak leaves.

April 5th. Am. Sparrow Hawk; four fresh eggs, nest was in an old Flicker's hole 10 feet up, eggs were laid on rotten chips at bottom of cavity.

April 16th. Ground Dove; took set of two fresh eggs, the nest was a shallow platform composed of grass and weeds and was situated on the tip end of an orange limb 10 feet up. It was an old nest repaired.

April 18th. Killdeer; took a set of three fresh eggs, nest was a slight depression in the ground lined with bits of grass and was on the lake shore.

April 20th. Cardinal Grosbeak; three eggs, the nest was small and deeply cupped, composed of spanish moss lined with fine grass, and placed in a small pine 8 feet up. I notice one thing about the nest of this bird in this locality: the nest always contains pieces of dead palmetto leaf, no matter how far it may be to a palmetto patch.

April 22. Fla. Screech Owl; three eggs, incubation advanced. The nest was in an old woodpecker's hole 10 feet up, the hole was lined with a few dead oak leaves. Found a Ground Dove's nest building, also several Jays nests nearly finished in every instance; I saw the bird building.

April 24th. Took a set of four fresh eggs of the Mocking Bird, nest was in an orange tree 6 feet up, Carolina Chickadee, five young, nest was a natural cavity in a pine stub 6 feet from the ground. Climbed 15 feet to a Flicker's hole expecting to find owl eggs and found a nest of young squirrels instead.

April 25th. Blue Jay; four fresh eggs, nest was in an orange tree 15 feet up, made of twigs and grass lined with black oak rootlets; In many nests which I have found, I never knew the materials of which it was composed to

vary from the one just described.

April 26th. Wood Duck; found a nest of this species 50 feet up in a natural cavity of a dead pine tree and contained thirteen eggs, incubation advanced.

April 29th. Ground Dove; two fresh eggs, nest was in an orange tree 8 feet up. A mere platform made of fine grass placed at the extremity of a limb. Fla. Blue Jay; four fresh eggs, nest was in an orange tree 15 feet up composed of the usual material.

May 2nd. Ground Dove nest; on the ground in an open ploughed field and contained one young and one egg.

May 2nd. Loggerhead Shrike; two sets, one of five and one of six; all fresh. Both nests were in orange trees about 8 feet up and were composed of the usual material. Am. Sparrow Hawk; four fresh eggs, incubation about one-half, nest was in a natural cavity in a green pine fifty feet from the ground.

May 3rd. Brown-headed Nuthatch; two nests, both were in pine stubs 6 feet up, lined with bits of wool and pine mast. One nest contained four young and the other two fresh eggs. This bird is very abundant in the flat-woods country and the nests are easily found by tapping the stubs with a stick and if the stump is inhabited the bird will fly out.

On my way home I found two young Bitterns that had just left the nest.

May 6th. Florida Red-shouldered Hawk nest was in a pine fifty feet up and contained two young. The nest was about two feet in diameter outside, slightly hollowed and contained a few small green oak branches. There was another nest near by about 75 feet up which I could not climb to and I am certain it contained eggs as both birds were sailing around very much distressed.

May 7th. Took a beautiful set of two eggs of the Night Hawk; the eggs were laid on the ground in an orange grove.

May 8th. Brown-headed Nuthatch;

found a set of four fresh eggs. The nest was in a pine stub 6 feet up lined with bits of wool and rotten wood. Saw a "Loggerhead" building in a green pine 30 feet up.

May 24th. Took a fine set of seventeen Fla. Quail eggs. The nest was on the ground well concealed under a bunch of wire grass.

June 2nd. Great Crested Flycatcher nest was in the hollow limb of an oak 10 feet up. In the mouth of the hole were two pieces of snake skin about six inches long; the nest contained four fine eggs slighted incubated.

June 5th. "Joree" White-eyed Towhee; nest containing three young, situated in a low bush.

#### A Trip to Devil's Glen.

On the morning of April 20th, the writer, in company with two other "bird cranks," as we were called, started on an eight mile tramp to a place known as Devil's Glen, near Davenport, Iowa.

We were well loaded down with luggage—two guns, ammunition, about four knapsacks, lunches, canteens, field glasses, and the many articles usually accompanying the collector.

After crossing a few pastures, we struck a road that led us to Duck Creek, which we were to follow to Devil's Glen. The creek was surrounded on either side by open woods, which in season affords abundant harvest for the collector; but one has to travel about three miles down the creek to get beyond the bounds of the "mischievous small boy," and the "great American Egg Hog."

As we proceed, keeping out of mud-holes as best we can, we watch the tree-tops, and listen to hear the voice of some new bird arrival. We are surrounded by Kingfishers, Baywinged Buntings, Blue Jays, Robins, and many other residents and early arrivals.

As this was rather early for nests, we did not expect to find much in that line, but succeeded in getting a set of four well incubated crows eggs, which were successfully blown.

We found a nest of the Phoebe on a beam under a bridge and were anxious to know what was in it; but in order to get to it one would have to climb out on the beam hand over hand. After looking at it for some time one of our party volunteered to climb to it, or rather to try to. He succeeded in getting nearly there—he could almost reach it—but, “so near and yet so far.” Once out there he could not get back; he was all tired out and there was only one thing he could do—to drop in the creek. He did so, and was neither drowned or hurt, as he lit in soft mud about a foot deep. After the rest of us had tried our climbing abilities, he was ready to make another attempt, and this time succeeded in reaching the nest, which was found to contain two pearly white eggs, which we left.

While we were eating our lunch a number of Belted Kingfishers kept flying past and we decided to get one if possible. After they had flown past several times one lit in a tree not far off and our adventurer the one who dropped from the bridge succeeded in shooting it, but it fell on the other side of the creek and there was no bridge within a mile's walk. He said he would not leave it there so he waded across in frigid water and the next day was rewarded by a severe cold.

After we had gone a couple of miles farther on a small bird flew to a bush directly in front of us. It appeared to be something new and one of the guns was quickly put into use which brought him down. It was found to be a partially Albino Field Sparrow (*Spizella pusilla*) having the pinkish bill of the Field Sparrow, and otherwise answering its description with the exception that it had a white head.

But our luck didn't end here. We had nearly reached the Glen and were gazing in the distance for the wagon that was to convey us home, when a Summer Redbird (*Piranga rubra*) rare in these parts, suddenly flew up in front of us, and it was not long before it too, was placed in a paper cone and was packed in a knapsack. We considered this a prize alone worth our day's tramp.

At the glen we met the one who was to take us home, who is also a bird enthusiast. He displayed a Pine Creeping Warbler (*Dendroica pinus*) as the result of his two hour's hunt. This bird is rather new to this state; at any rate some of our prominent ornithologists do not mention it in their catalogues. In Coues' description of this bird, he calls special attention to the fact that the “tail blotches are confined to two outer pairs of feathers.” Our bird had three outer pairs of tail-blotches; but it was sent to the government ornithologist, and other competent authorities, who positively identified it as the Pine Creeping warbler. Of four or five specimens obtained during the season no two were alike.

After viewing our friend's prize we relieved ourselves of our luggage—refreshed ourselves at the spring, and were ready for more worlds to conquer, when a Lark Finch (*Chondestes grammacus*) lit in a tree not far off; one of our party succeeded in wounding it, and after chasing it around for some time captured it. Not a very common bird around there.

As we were going home we saw several Cave Swallows that had arrived from their winter quarters sometime during the day. We also saw the chimney swallows for the first time in the season; but I am told they arrived a day or two before.

CHAS. E. CRAM,  
Burlington, Iowa.

**A Simple Contrivance—Solicited.**

In regard to "T. S. B's" article in the last No. of the OOLOGIST, I would say that he may take the eggs from most Woodpeckers' nests, without destroying the cavity, in the following manner:

Take an old tin spoon, bend the handle at right angles; fasten a piece of rattan or any other elastic substance, about two feet in length and the less the diameter the better. (I have often used small green twigs, which answer the purpose first rate), then bend the bowl of the spoon a little sideways.

When about to use it, introduce the spoon though the entrance to the cavity and by using the "reflector" and exercising a little care any number of sets may be taken, without danger of breaking an egg. Never attempt to take out more than one egg at a time. Of course this device will not prove satisfactory in every case, but can be used in the general run.

There are numerous other contrivances, such as cutting out a neat square block near the bottom of the hole and placing it back again after procuring the egg, etc., etc., but the former. I have found to be most serviceable of all. As to ascertaining whether and when there are any eggs in a King Fisher's without disturbing it I advise him to keep a constant and careful watch over the parent birds and use his own judgement.

Sometimes the eggs may be dislosed with the aid of a good dark lantern, when the burrows run straight.

"STACK,"

Poughkeepsie, N. Y.

[When ye editor was doing Field Work he found that a piece of common fence wire about 2 ft. in length with a loop from 1 to 2 inches in diameter made in one end to which he attached a miniature net or bag of mosquito netting having a depth of from one-half to

one inch. The wire could be bent at times of using to adapt itself to any hole and the net made the risk from eggs rolling out very slight. Ed.

**Capture of a Trumpeter Swan.**

It may be of interest to readers of the OOLOGIST if I give a little statement of my capture of a Trumpeter Swan. Early in this month, Nov. 1889, while lying for ducks in a boat, in evening, on Slaughter Beach Marsh, a flock of 12 to 15 came directly over me, and I succeeded in winging one which came down with such velocity and weight, that I am satisfied that either myself or the boat could not have survived the shock had it struck either; but fortunately it missed us by about twenty feet.

Time, Nov. 8, '89; Full moon; Weight 17½ pounds; Length—extremes: Bill to tail, 4 feet six inches; Bill to end of toes, 7 feet; Feet projected six inches back of the tail feathers; Wing tips, 7 feet; Color Pure white; Sex, Female. Age Old and Black feet, 25 to 100; Flesh, very sweet and good; Pelt mounted and to be seen at my house.

As I desired to preserve the specimen in good shape, I first tried my knife in the roof of her mouth cutting to the brain, but they are said to be long lived and she succeeded well in extending it after the broken wing and sticking. Then I tried to drown her but soon perceived it was taking in air through the body; supposedly through a wound, so gave up trying to drown it, carried it to camp and hung it up by the heels when it bled more freely; but still had life enough to soil the plumage if allowed to struggle. My companion brought the lantern and I examined for the shot hole but could not find none.

It soon became evident that the bird was breathing, through her broken wing we could hear it and feel the air

come through the broken wing, but could not believe it. The throat I think was then filled with clots of blood. I plugged the hollow bone and it died, immediately. I preserved the wing bones after cooking and find a free passage of air from wing to lungs.

The flock of Swans passed along southward for two miles over land and were seen by the farmers apparently in great trouble, when one separated out and started back while the others circled around and waited. That single bird came back calling every moment, but passed east out of hearing over the Delaware Bay. About one-fourth of an hour after we heard him coming again from the north on the same migratory passage made by the whole flock passing directly over my head calling every moment; but very high up. I answered the call and he made one circle around us and left; I have read they never mate but once, who knows?

GEO. L. STEVENS,  
LINCOLN, DELAWARE.

#### A Query and Answer.

Last spring while in the woods I found a nest of the Least Flycatcher (*Empidonax Minimus*.) situated in a maple about twelve feet up with a floor over four of its eggs neatly laid in, but so thin that they could be seen through easily. The nest was as neatly shaped inside as though there was nothing in the under part. It was apparently deserted—there was no eggs in upper part. The question is did the owners of the eggs put the floor in or did some other bird do it and what for? Anyone who can give me any information on the subject, I should like to hear from them through the columns of THE OOLOGIST. In regard to the blackbird query given in the November OOLOGIST my opinion is this: that the place that the gentlemen observed them lies between a favorite roosting and

feeding ground, and as to the particular date I think is owing to some kind of food which at the particular date of which he mentions, becomes at the state of maturity in which they like it best. Where I used to hunt, (StClair Flats near the Thames Lighthouse,) I used to observe immense flocks of blackbirds passing the dummy lighthouse going southward in the morning, returning northward at night.

A. W. HANAFORD,  
Grand Rapids, Mich.

[“Floors” are frequently placed in nests, in those of the Yellow Warbler in particular, but usually, in order to cover up eggs of the Cowbird. Ed.]

#### A Ferocious Eagle.

On the 28 of Nov. 1889, not far from this place, a farmer's 9-year-old son saw a strange looking bird attack a beautiful Peacock; the boy seized a club, ran up and struck the bird a stunning blow on the head, which caused the bird to release its hold on the Peacock.

In maddened fury it turned upon the boy and after a brief struggle succeeded in fastening one of its talons in the boy's trousers; a dog that came to to assist in the struggle, was seized by the tail with the other talon; then the bird tried to ascend, but on account of its heavy burden was delayed. The father was attracted by the cries of the boy and howls of the dog, appeared on the scene at this critical moment, and dealt the bird a heavy blow, breaking its wing, which caused it to loosen its hold on both the boy and dog. After which they succeeded in capturing the bird.

The bird proved to be a Black or Bald Eagle which measured about 9 ft. from tip to tip.

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ALBION, N. Y., JAN., 1890.

NO. 1

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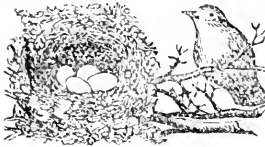
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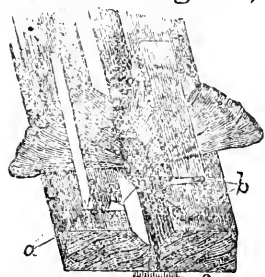
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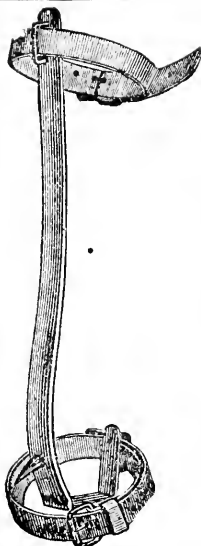
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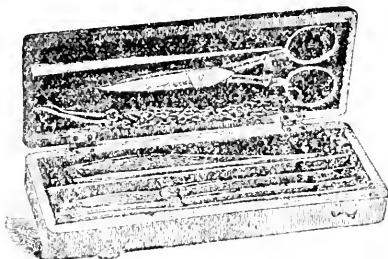
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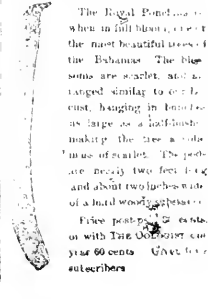
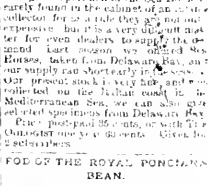
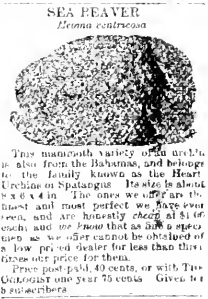
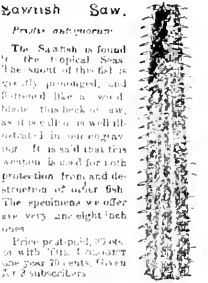
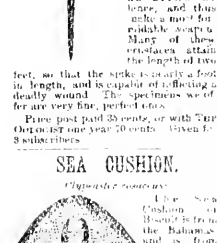
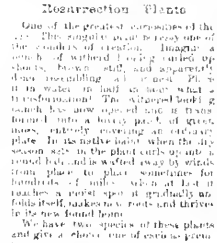
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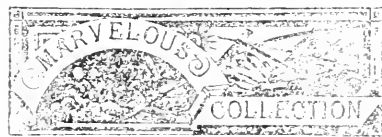
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## THE YOUNG NATURALIST'S



A choice specimen of anything on the list will be sent post-paid for 75¢. The following are the contents of this volume, sent in a separate list for 25¢. (25¢ for postage.)

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| <ul style="list-style-type: none"> <li>1. 1 Live red-tail Hawk</li> <li>2. 1 Live Merlin</li> <li>3. 2 Live Sharp-shinned Hawks</li> <li>4. 2 Live Screech Owls</li> <li>5. 1 Live Nighthawk</li> <li>6. 1 Live Whip-poorwill</li> <li>7. 1 Live Cowbird</li> <li>8. 1 Live Field Sparrow</li> <li>9. 1 Live Song Sparrow</li> <li>10. 1 Live Chipping Sparrow</li> <li>11. 1 Live Goldfinch</li> <li>12. 1 Live Starling</li> <li>13. 1 Live House Wren</li> <li>14. 1 Live Cuckoo</li> <li>15. 1 Live Kingbird</li> <li>16. 1 Live Blue Jay</li> <li>17. 1 Live Red-shouldered Hawk</li> <li>18. 1 Live Bald Eagle</li> <li>19. 1 Live Osprey</li> <li>20. 1 Live Great Horned Owl</li> <li>21. 1 Live Screech Owl</li> <li>22. 1 Live Nighthawk</li> <li>23. 1 Live Sharp-shinned Hawk</li> <li>24. 1 Live Screech Owl</li> <li>25. 1 Live Nighthawk</li> <li>26. 1 Live Sharp-shinned Hawk</li> <li>27. 1 Live Screech Owl</li> <li>28. 1 Live Nighthawk</li> <li>29. 1 Live Sharp-shinned Hawk</li> <li>30. 1 Live Screech 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This is a truly one of the most "Marvelous" collections ever put up. It is a really selected and beautiful work, and would prove a valuable addition to any "Naturalist's" library. The price is \$1.00. The contents are all in the most beautiful order. \$2.00 will send the entire collection by return mail, each specimen labeled, and all wrapped separately, with delivery and satisfaction guaranteed, for

Address plainly, FRANK H. LATTIN, ALBION, N. Y.

### No. 69. A Mound Builder's Knife.

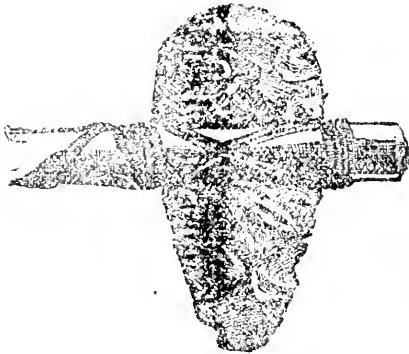


Arrowheads are common in almost every collection, but a

g. Flint knife is becoming quite rare. We have a choice not collected in Southern Indiana, cheap at odds, each which we have decided to offer as a premium.

Price post-paid 35 cents, or with THE OOLOGIST one year 60 cents. Given for 3 subscribers.

### No. 70. Flint War Club.



We have a fine assortment of unmounted Flint War Clubs. (Extra large specimens 90c.)

Price post-paid 25 cents, or with THE OOLOGIST one year 60 cents. Given for 2 subscribers.

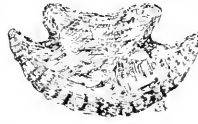
### No. 71. Bird Arrow Points.



Almost every collector has heard of the beautiful arrow points from the Northwest. They are alike remarkable for their minute size, for fine workmanship and beautiful material. The above cuts are actual size of the specimens; they were made from and we have them smaller. They are much sought after for jewelry and are mostly made from agate, chert, jony, sand-onyx, smoky opiz and other semi-precious stones. They are rapidly becoming very rare and can no longer be obtained in quantity at any price. The ones we offer are chert from the Williamette Valley, Oregon.

Price post-paid 35 cents, or with THE OOLOGIST one year 70 cents. Given for 3 subscribers.

### No. 72. Two Flint Scrapers.



While Scrapers are not as rare as Knives they are quite valuable and rapidly becoming more rare. We

have the best assortment we have ever seen and as this premium we give two selected ones.—One notched and one unnotched specimen, collected in same locality as premium No. 69, and the two are worth at retail from 50c to 75c.

Price post-paid 35 cents, or with THE OOLOGIST one year 70 cents. Given for 3 subscribers.

### No. 73. Manton's Field Botany.

A hand-book for the collector. Containing instruction for gathering and preserving plants, and the formation of a Herbarium. Also, complete instructions in Leaf Photography, Plant Printing, and the Skeletonizing of Leaves. Illustrated, cloth.

Price post-paid 50 cents, or with THE OOLOGIST one year 80 cents. Given for 4 subscribers.

### No. 74. SIX ARROWHEADS.



For this premium we have selected six fine arrowheads, each from a different state or country.

All labeled giving locality.

Price post-paid 35 cents, or with THE OOLOGIST one year 60 cents. Given for 3 subscribers.

### No. 75. MODERN POTTERY.



Miniature pottery made of adobe clay by the Pima Indians, of Arizona. All pieces perfect, no two alike. Vases, urns, pitchers, etc. One piece as premium.

Price post-paid 20 cents, or with THE OOLOGIST one year 60 cents. Given for 3 subscribers.

NO. 76. A Cut and Polished Gem.



Making the finest of cabinet specimens; also very fine for ladies brooches or for a pocket piece or miniature paper weights. Our cut shows the exact size and markings of an average specimen; they are about 1/4 in. thick

of course no two are exactly alike some may be a trifle larger or smaller, or may be round instead of oblong. Until last season, we never sold a specimen of this quality for less than 75cts. We can furnish this premium in the following var. of agates, viz: Black striped, Red striped, Clouded, Ribbon and Carnelian.

Price post-paid 25 cents, or with THE OOLOGIST one year 60 cents. Given for 2 subscribers.

Collection of Fossils.

This is a very desirable collection, and contains regular 2c. specimens of each species. All are labeled with scientific name and locality.

The Collection contains:

- 1 Trilobite, Ills.
- 1 Scapolite, Black Hills.
- 1 Fossil Shark Tooth So. Car.
- 1 Fossil Fern in mudite, Mazan Creek.
- 1 Fossil Sea Urchin, Texas.
- 1 Polyp Coral, N. Y.
- 1 Pc. Baculite, Black Hills.

Price post-paid, \$1.10, or with THE OOLOGIST one year, \$1.50. Given for 10 subscribers.

No. 78.

A Good Trilobite.



*Calymene Niagracensis* Var (*Blumenbachii*)

Trilobites are always in demand and collectors rarely have a chance to obtain one so reasonable.

Price post-paid, 25 cents, or with THE OOLOGIST one year 60 cents. Given for 2 subscribers.

NO. 79.



© POLISHED AGATES. ©

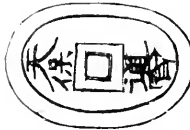
*Tiger Eye, &c., Crystals of Amethyst Quartz, &c., &c.*

Our patrons last year kept us pretty busy wrapping up this premium; and they had ought to too, for we offer them at about half the usual prices. The above cut shows the exact average size of the specimens. Locality is given with each specimen. All have one surface cut and polished, except the last seven which are more desirable in their natural state.

Red Striped Agate, Black Striped Agate, Crystal Agate, Clouded Agate, Green Moss Agate, Carnelian Agate, Fortification Agate, Sard-onyx, Ribbon Agate, Nicello Onyx, Black Onyx, Wood Agate, Bloodstone, Agate-Jasper, Eye Agate, "Bird's Eye" Coral (*Acropora*, *Davidsoni*), "Fish Egg" Coral (*Favosites Canadensis*), Labradorite, Crocidolite (Tiger Eye), Amethyst (Cluster of Crystals), Quartz (a fine crystal, large as cut), Native Lodestone, Geode of Chalcedony, "Electric" Stone, (emits flashes of light when rubbed in the dark), Satin Spar, A perfect Quartz Geode. We offer any one from the above list.

Price post-paid 45 cents, or with THE OOLOGIST one year 80 cents. Given for 4 subscribers.

**No. 80. Desirable Coins.**



This collection is a very desirable one for the curiosity collector whether he be interested in coins or not; it

contains the following coins, viz: One Japanese Oblong Tempo (See cent), 1 Chinese Brass Cash, 1 Foreign Coin over 100 years old, plain date; and one V Nickel without the word "cents," '83 issue.

Price post-paid 35 cents, or with THE OOLOGIST one year 69 cents. Given for 2 subscribers.

**No. 81. Twelve Foreign Coins.**



The coins in this premium are all different and from many different countries. (The box from which we select the ones offered contains over three thousand coins, among which can be found coins to represent almost every country on the globe).

The coins we select for this premium are all good and mostly very old; there will be at least one or two in every lot with plain date that is over one hundred years old while hardly running them over we found two over 250 years old.

Price post-paid, 40 cents, or with THE OOLOGIST one year, 74c. Given for 4 subscribers.

**No. 82. Twenty-five Foreign Coins.**

A mixed lot, the poorest ones from the 3600 lot mentioned in last premium. They are not selected, and will run about ten or fifteen varieties in the lot, many very old.

Price post-paid, 45 cents, or with THE OOLOGIST one year, 75 cents. Given for 4 subscribers.

**No. 83. FOREIGN STAMPS.**



This premium will more than please the young stamp collector.

It contains one packet of 100 foreign stamps, no two alike; one packet of 500 well mixed foreign stamps and one sheet of 30 varieties arranged approval sheet style. The stamps on this sheet

alone at Scott's Cat. rates are worth 60 cts.

Price post-paid, 40 cents, or with THE OOLOGIST one year, 70 cents. Given for 3 subscribers.

**No. 84. STAMP ALBUM.**

And a fine one too, for the young Philatelist. It contains 96 pages with spaces for 2600 stamps, illustrated with engravings of the type of almost every Postage Stamp, well bound in boards, half cloth. We also give with this premium, a sheet of gummed paper, so that you can mount your stamp's on hinges.

Price post-paid 35 cents, or with THE OOLOGIST one year, 70 cents. Given for 3 subscribers.

**No. 85. Satin Spar Scarf or Lace Pin.**

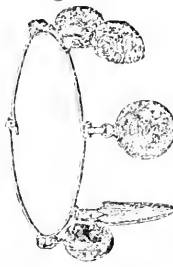
During the past few years we have retailed from our stores at Chautauqua nearly ever kind of pin made from Minerals, Gems, Shells, Beans or Teeth known to the resort trade, but we can honestly say that we never offered for sale an article in this line that proved half as popular as our Satin Spar Scarf or Lace Pin. The Spar from which these pins are manufactured is a very beautiful fibrous, white (almost translucent) mineral having a pearl or satin-like lustre, from Bridgford, England. (We will mail a fine sample in the rough for 5 cts.)



These pins are equally appropriate for either a lady or a gentleman to wear. The mountings are of the best rolled gold and the satin spar pendant, are of various forms, the most popular being round, oblong, barrel, ball and acorn shaped.

Price post-paid, 25 cents, or with THE OOLOGIST one year, 60 cents. Given for 2 subscribers.

**Bangle Bracelet.**



With two selected Sea Beans, Shell and Alligator tooth Bangles. For our Bangle and Pins we use only the finest Beans, Shells and Teeth, which are polished and polished in the highest perfection.

The mountings are of the best rolled plate that will not tarnish. All are made strong and durable. Price post-paid 25 cents, or with THE OOLOGIST one year 65 cents. Given for 2 subscribers.

**Bangle Pin.**



Two Red Sea Beans and one Shell Pendant. Price post-paid 25 cents, or with THE OOLOGIST one year 65 cents. Given for 2 subscribers.

**A FOUR BLADE PEANUT KNIFE.**



We have also a selection from that little known elegant pocket knife, made by brass bound and tipped, and made knife is brass in and throughout. In fact it is a most showy yet reliable article. Send for one and you will find we think that it cost you from seventy five cents to one dollar.

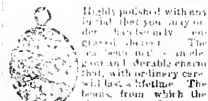
Price post-paid 30 cents, or with THE OOLOGIST one year 60 cents. Given for 3 subscribers.

**Bangle Pin.**

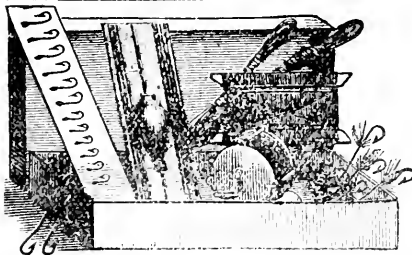


Two Red Sea Beans and one Alligator tooth pendant. Price post-paid 25 cents, or with THE OOLOGIST one year 65 cents. Given for 2 subscribers.

**SEA BEAN MATCH GRINDERS.**



Highly polished with any kind that you may order. Absolutely unexcelled quality. The sea beans are made from an indurable material, with ordinary care will last a lifetime. The frames from which the cases are often were made, were collected on the West Indies. Price post-paid 25 cents, or with THE OOLOGIST one year 65 cents. Given for 2 subscribers.



**A Fisherman's Outfit.**

The Oologist's Fisherman's Outfit contains 4 drab fish lines, each 16 ft. long, two of which are for front and small fish, one for medium size fish and the other for large and gamey fish; it also contains one extra fine quality 50 ft. drab line wound on a wooden block; this line is suitable for all ordinary fishing; one furnished line with double snell hook, 16 ft. of genuine linen line with a long fancy colored barrel-shaped float. This line cannot fail to suit everyone, and it's already for business. EIGHTEEN BEST STEEL KIRBY RINGED FISH-HOOKS (assorted sizes.) These are best grade of hooks, warranted strong, sharp in points and barbs and handy to use; anybody being able to tie their line into the ring of the hook. With this set of hooks the fisherman can try his luck for any size fish from a minnow to a 40 lb. catfish. TWO SIZES SNELL HOOKS and two double-ringed sinkers of the size generally used, one round tin baitbox, size 2 1/2 x 1 in. can be carried in the vest pocket.

As much sport can be had from this outfit as from a \$10 one. Everything warranted as represented. The outfit is securely packed in a strong slide-cover wooden box, size 5 1/2 x 2 3/4 x 2 1/2 in. Just the thing for holding fishing tackle.

Price post-paid, 50 cents, or with THE OOLOGIST one year 80 cents. Given for 4 subscribers.



No. 91.

**ALLIGATOR TOOTH SCARF OR LACE PIN.**

Powder-horn Design, one of the best and most popular pieces of jewelry into which the alligator's tooth is manufactured.

Strongly made and finely finished; cap of gold.

This pin is usually sold at from \$1.00 to \$1.50

Price post-paid, 75 cents, or with THE OOLOGIST one year, 90 cents. Given for 5 subscribers.

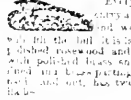
**The Solargraph Time-keeper and Compass, Combined.**



It is a genuine compass with astronomical features for finding the time by the sun. Made by the same firm who make the most accurate watches and the finest gold watches in the world. The combined use of the solargraph and compass is a great convenience. It is not only a time-keeper but a compass. It is not only a compass but a time-keeper. It is not only a time-keeper but a compass. It is not only a compass but a time-keeper.

Price post-paid, 40 cents, or with THE OOLOGIST one year 70 cents. Given for 3 subscribers.

**A Good Jackknife.**



Every one who carries a good jackknife will think this one was made for him. It is large and handy, 1 1/2 inch blade and a strong handle, with polished brass ends, full brass rivets and a fine patting, well-polished steel and not the low grade plated steel.

Price post-paid, 20 cents, or with THE OOLOGIST one year 70 cents. Given for 3 subscribers.

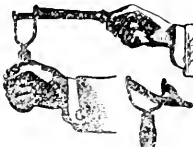
**NATURAL HISTORY PLATS**

By LOUISA P. BOWKINS. GEOLOGICAL AND MINERALOGICAL.

The contents of this book comprise diagrams and descriptions of all the rocks, the minerals, fossils and the other natural objects which have been systematically used by geologists and mineralogists. This is the first book of the kind ever published. It is the result of the author's personal observations and is the most complete and accurate work of the kind ever published. It is the result of the author's personal observations and is the most complete and accurate work of the kind ever published.

Price post-paid, 40 cents, or with THE OOLOGIST one year 70 cents. Given for 3 subscribers.

**Improved Catapult or Pocket Gun.**



The new Improved Catapult or Pocket Gun, which is now being sold, is a very simple and durable and has been found to be the best of its kind. It is made of brass and steel and is very strong and durable. It is not only a pocket gun but a catapult. It is not only a catapult but a pocket gun. It is not only a pocket gun but a catapult.

Price post-paid, 10 cents, or with THE OOLOGIST one year 50 cents. Given for 1 subscriber.

**Mineral Collection.**



Containing 10 fine specimens of the following minerals: Quartz, Crystal, Chalk, Ivory, Electric Stone, Petroleum, Selenite, Calcite, Pyrite, Tourmaline, Opal, Mica, Petrified Wood, Amber, Spinel, Garnet, Rock, Rose Quartz, Bohemian.

The specimens in this collection always retail at five cents each. Price post-paid, 40 cents, or with THE OOLOGIST one year 70 cents. Given for 3 subscribers.

**The American Ornithologists' Abridged Check-List of North American Birds.**

Containing the Latin and English names of all the Species and Sub-species, including those added in the Supplement. It gives the New A. O. U. No's, also those of Baird, Ridgway, and of Coues, both 1873 and 1882; Nearly 150 pages; size 6x9 in.; printed on one side of paper only; paper covers.

Price post-paid 50 cents, or with THE OOLOGIST one year 80 cents. Given for 4 subscribers.

**Crispin's Awl.**

This is a tool for everybody. It is a hollow handle made of hard wood, five inches long, and weighing three ounces. It contains inside, on a spool, 50 feet of best wax line sho-thread. The spool is also hollow, and contains three awls and three needles of various shapes and sizes. The thread fits the needles, and the awls fit the handle, and are held by a set screw. It is for use in the house, stable, field, camp or on the road, for making immediate repairs, when one use of it will be worth more than its whole cost. Every collector and Taxidermist should have one in his kit.

Price post-paid 35 cents, or with THE OOLOGIST one year 65 cents. Given for three subscribers.

## FORT ANCIENT.

A New Work on Ohio Valley Earthworks

BY WARREN K. MOOREHEAD.

For a number of years Mr. Moorehead has spent his entire time in opening mounds and in photographing and surveying the earthworks of the prehistoric races that once inhabited the Ohio valley. He has prepared a work on Fort Ancient which differs from any ever published on antiquities. It has been the custom of those who wrote upon this subject to compile from the writings of others and do very little field work themselves. Mr. Moorehead in his work has not used an illustration that has been used by anyone else, his matter is new and is taken from the mounds and graves themselves, and not from what others have written. He makes field work a specialty.

No expense or pains have been spared to make this book attractive to the scientific public. The old archaeologist will find it a valuable addition to his library. The young collector will find in it matter for his careful study and consideration.

It is a large book with 200 pages, containing 35 full page illustrations made from photographs taken in the field.

Post-paid \$2.00 or with THE OOLOGIST one year \$2.15. Given for 12 subscribers.

## Five Polished Gems.

This collection contains a choice polished specimen of Onyx, Agate, Moss Agate, Tiger-eye (*Crocidolite*) and Amethyst, size from one inch to two inches each. Western dealers charge \$1.00 for a similar but no better collection.

Price post-paid 50 cents, or with THE OOLOGIST one year 75 cents. Given for four subscribers.

## Collection of Corals.



Contains a fine small specimen of FIFTEEN different species of Coral. This collection contains specimens from all noted localities and shows a great variety of forms and color.

Price post-paid 75 cents or with THE OOLOGIST one year 85 cents. Given for six subscribers.

## 35 Small Shells.



A collection of 30 named species of small shells, average size about one inch. The following species

will be found in this collection:

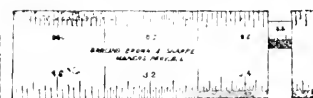
*Aporrhais pes-pelecani*, *Murex pudoricolor*, *Fasciolaria tulipa*, *Purpura patula*, *Columbella mercatoria*, several species of *Olivas*, *Cyprus*, *Scritus*, *Margaritella apicina*, *Asaphis coccinea*, *Tellina radiata*, *Chiton squamosus*, *Fissurella Barbadosis*, *Crepidula fornicata*, *Dentalium cutalis*, *Pupa uca*.



The following families also have representatives in this collection: *Conus*, *Turritella*, *Formetus*, *Natica*, and others. A splendid collection, scientifically named, and offered at one-third the price usually charged for as good a one.

Price post-paid \$1.00 or with THE OOLOGIST one year \$1.25. Given for eight subscribers.

## Caliper Rule.



A Rule like this cut we can furnish

you for \$2.50. The rule we offer as premium is a fine six-inch, brass-trimmed, folding rule with a brass caliper attachment, registering 16ths. Should you desire the results in 100ths you can readily obtain it by multiplying by 64.

Price post-paid 25 cents, or with THE OOLOGIST one year 60 cents. Given for two subscribers.

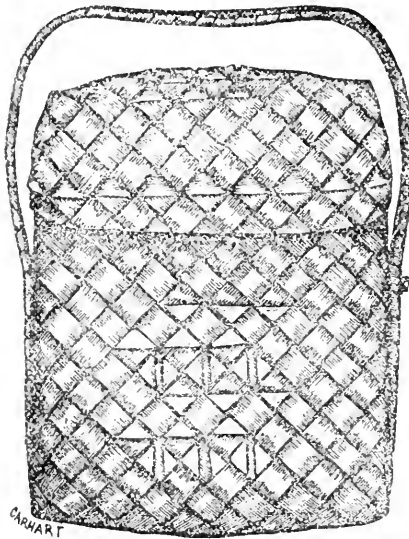
## Brown Jug Charms.



One of the latest "rag-ees." Perfectly shaped little jugs in exact imitation of a regular "vinegar holder." They are full glazed finish, natural color and correct miniatures in every respect. They are in great favor as charms or bangles, some people wearing four or five at a time of assorted sizes. We give 12 Jugs of assorted sizes and colors for this premium.

Price post-paid 25 cents, or with THE OOLOGIST one year 60 cents. Given for two subscribers.

**A Palmetto Basket.**



A genuine curiosity, and one of the most substantial, durable, and unique baskets made. This basket is hand-made, by the natives of the Bahamas, from the leaves of the palmetto growing there. The baskets are simply non-destructable, you can crush them, double them up, twist them into a rope, let them get water-soaked for a week, in fact use them about as rough as you please, straighten them out and they are just as good as new. The smaller sizes, ladies find a very convenient substitute for the popular hand-bag, while the larger ones, that of a satchel or basket. Collectors will find them indispensable for carrying lunch, instruments, tackle, game or specimens, in fact it is one of the best contrivances we have seen for these purposes. We keep them in four sizes, and offer them as follows, post-paid:

- No. 1, size 6 x 5½ x 3 in. 30 cents
- No. 2, size 7 x 6½ x 3½ in. 45 cents.
- No. 3, size 9 x 8 x 4 in. 60 cents.
- No. 4, size 10 x 9 x 4 in. 75 cents.

If you desire THE OOLOGIST, add 25 cents to these prices. Given respectively for 2, 3, 4 and 5 subscribers.

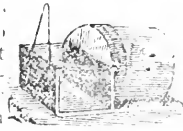
**FOSSIL FISH.**

A very fine specimen scientifically named, from Green River, Wyoming, and such as are usually sold for at least \$2.00. The slab on which it is imbedded, is about four inches by 8 inches.

Price post-paid \$1.25, or with THE OOLOGIST one year \$1.50. Given for ten subscribers.

**Revolving Trap or Cage.**

A very handy article for the naturalist to have on hand; that rare species *Mus musculus* can be readily captured in it, then using it as a cage you can profitably study its habits.



Price post-paid 35 cents, or with THE OOLOGIST one year 65 cents. Given for 2 subscribers.

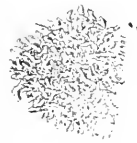


**BENCH VISE.**

The neatest and handiest little tool out. Something useful and needed by every one, indispensable to the taxidermist. It is worth its price for a single service.

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Contains a choice 25 cent specimen of 12 different species. This makes a very fine and showy collection and one that we can guarantee to please. If

you order this collection by express we can give you much larger specimens of many species.



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**A Good Microscope.**



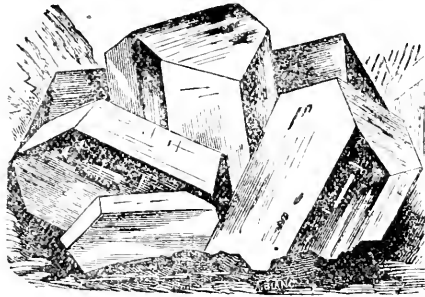
A good Three-legged Microscope with double-lens of very strong magnifying power.

This is the best microscope made, for examining ores, minerals, flowers and specimens of all kinds, and is the same that is usually

retailed at from 75 cts. to \$1.00.

Price post-paid, 50 cents, or with THE OOLOGIST one year, 75 cents. Given for 4 subscribers.

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IS COMPOSED OF

50 DIFFERENT MINERALS

From all parts of the World, viz: Europe, Asia, Africa, North America, South America, West Indies, etc.

And will be sent pre-paid, accompanied with complete Descriptive Handbook, for

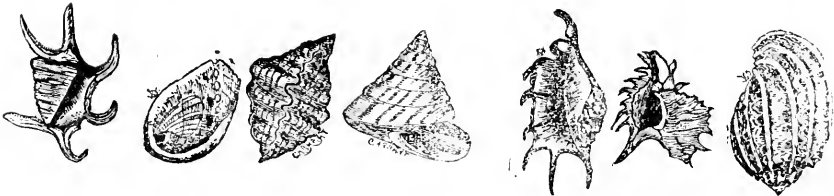
**ONLY \$1.25.**

The following minerals are found in this collection, viz: Actinolite, Agate, Alabaster, Albite, Amethyst, Anhydrite, Argentiferous Galena, Asbestos, Asphaltum, Barite, Bismuth ore, Calcite, Catlinite, Chalcedony, Chalk, Chalcocopyrite, Chromite, Coquina, Dendrite, Dolomite, "Electric Stone," Enstatite, Fibrolite, Flint, Garnet, Gold Ore, Gypsum, Indurated Clay, Hematite, Jasper, Leelite, Limonite, Lode-stone, Magnesite, Magnetite, Marble, Marcasite, Mex. Onyx, Muscovite, Milky Quartz, Coke, Obsidian, Wood Opal, Pearl Spar, Pet. Wood, Porphyry, Pyrites, Quartz, Stal. Rose Quartz, Satin Spar, Serpentine, Stibnite, Crocidolite, Tourmaline, Tufa, Variscite, Wavellite, Williamsite.

The specimens in this collection are not the chippings that are usually sent out in low-priced collections, but are good specimens that will average nearly 1 in. x 1 in. each, properly labeled and wrapped separately.

Price post-paid \$1.25 or with THE COLOGIST one year \$1.40. Given for 10 subscribers.

## Twenty-five Large Showy Shells.



From our large assortment of beautiful shells we have selected 25 species among which will be found the following. All are very beautiful and many, when necessary to add to their beauty, have been polished:

Maggie Trochus (*Livona pica*), Turk's Cap (*Turbo sarnaticus*), White Ear (*Haliotis tuberculata*), Cockle Shell (*Cardium magnum*), East Indian Horsefoot Clam (*Hippopus maculata*), Silver-lip (*Strombus lentiginosus*), Snipe-billed Murex (*Murex lunelliana*), White Murex (*Murex canosus*), Rose Murex (*Murex regius*), Harp Shell (*Harpa ventricosa*), Marlinspike (*Terebra maculata*), Lettered Cone (*Conus hillii*), "Kid" Conch (*Strombus bituberculatus*), Spider Shell (*Pterocera lutea*), Hooked Scorpion (*Pterocera rugosa*), Mole Cowry (*Cypraea talpa*), Tiger Cowry (*Cypraea tigris*), Camo Shell (*Cassis rufa*), Spotted Snail *Turbo marmoratus*, Pearl Trochus (*Trochus niloticus*.)

The shells in this collection, in size, will range from three to six inches. They are of all colors and from all parts of the world. At ordinary prices they sell at an average of 25 cents each in the East and from 25 cents to 75 cents in the West. This collection is carefully packed in a light box and sent by express at the purchaser's expense.

Price \$4.00 or with THE COLOGIST one year \$4.25. Given for 30 subscribers.



THE OÖLOGIST.

Monthly. 50c. per Year.

Vol. VII,

ALBION, N. Y., FEB, 1890.

No. 2

**Exchanges and Wants.**

**Brief special announcements.** "Wants," "Exchanges" inserted in this department for 25 cents per 25 words. Notices over 25 words charged at the rate of one-half cent per word. No notice inserted for less than 25 cents. Notices which are merely indirect methods of soliciting cash purchasers cannot be admitted to these columns under any circumstances. Terms, etc. with order.

**THE EXCHANGE** Notice in Jan. OÖLOGIST is working wonders, and I have received already more offers of exchange than I can very well attend to. Very truly yours, WILL A. MOORE, Norwalk, Ohio.

**CURIOS** wanted for my museum. SEEBACH, Peru, Ills.

**FOR SALE OR EXCHANGE.**—100 minerals; 100 species fossils and lot of curiosities. Want tur overcoat, robe or field glass or others. HOMER SQUYER, Mingsville, Montana.

**WANTED.**—Reliable collectors in the United States and Canada, to collect Birds Eggs for me this season ('90). Collectors will do well to write to me for terms before engaging elsewhere. WILLIS N. FLEMING, Natick, Mass.

**TO EXCHANGE.**—A Telegraph instrument, valued at \$3.50, for Birds eggs or one pair climbers. What offers? Correspondence solicited. Address, ALLEN OGDEN, Brocton, N. Y.

**BOYS' Useful Pastimes,** for Davie's Key, Rollo's Experiments and Museum, and Sunrise Lands: cost \$3.50, for Eagle Spring gun, or Chicago air rifle or Climbers. J. C. GALLOWAY, Montgomery, Ohio.

**WANTED.**—To exchange the "Magicians Fun Book," 999 Startling Tricks. Edited by W. H. Cremer, (valued at \$1.) For the best offer of U. S. cents in good condition. GEO VAIL, 438 Saratoga St. Concord, N. Y.

**EXCHANGE.**—An International Stamp Album, contains 60 stamps, flags, rulers coats of arms. Small self-inking press, type, cuts, etc. Will exchange for microscope or sell. ELLIOT FIELD, Box 1, Wayne, Delaware Co., Pa.

**WANTED.**—To exchange a World Typewriter in good order for best offer of Bird Skins. Typewriter cost \$10.00 when new. WILLIAM T. SMITH, Box 94, Wayne, Del. Co., Pa.

**A GOOD.**—\$2.50 International Album, (5th ed.) with 450 var. stamps for perfect Indian relics, or for a fine first-class egg of Golden Eagle. Also some Iowa eggs to exchange. CHAS. KEYES, Mt. Vernon, Iowa.

**WANTED.**—TO PURCHASE COLLECTIONS OF INDIAN RELICS AND OTHER CURIOSITIES FOR WHICH CASH WILL BE PAID. PARTIES HAVING SUCH FOR SALE WILL PLEASE CORRESPOND WITH W. H. KING, JACKSONVILLE, ILLS.

American, European and Exotic Butterflies and Moths for cash and in exchange for Birds' Eggs, Birds' skins. All mounted and perfect. Very rare and beautiful specimens from India, Africa and South America; also live coccons from India and Europe to exchange for others of this country send for catalogue. PROF. CARL BRAUN, Naturalist, Bangor, Me.

**WANTED.**—To exchange a House Screech owl and tools, also eggs and curiosities to exchange. F. B. WHITEFIELD, Box 1-0, Clinton, Miss.

A FINE collection of over 100 kinds of eggs, also a fine set of egg blowing instruments in neat case to exchange for good single-barreled shot gun in good condition; side snap preferred. Eggs valued at \$2. Write for particulars. GEO. M. LINCOLN, Lock Box 713, Madison, N. Y.

**WANTED.**—Good Ornithology (with colored plates preferred). Will give Mtd. Birds Mammals Birds skins, Birds eggs and some cash. OTTO L. BULLIS, Winnebago City, Minn.

**TO EXCHANGE.**—For every complete first-class set of Birds' Eggs, with data, sent me, I will give a receipt for making Rubber Stamps. FRED W. STACK, Poughkeepsie, N. Y.

**COLLECTORS.**—\$1.35 Steam Engine for \$1.00 in eggs; 13 var. Stamps for every egg sent; or, Alaska and Wash. Curios, to exchange. ULLHERTZ, Kent, Wash.

I WILL GIVE 32 good foreign stamps all different on sheet, for every twelve cents worth of eggs first-class sent me. GEO. A. FREEMAN, Natick, Mass.

**WANTED.**—A good Partridge dog, Pointer or Setter much preferred, but any good Partridge dog acceptable. Young dog preferred. I will give in exchange, Birds eggs in sets and mounted birds. Address, H. E. BERRY, Damariscotta, Me.

**AMERICAN** single-barrel breech loading shot gun, Trigger Action, Fine Stub Twist Barrel, No. 10 bore, 25 brass shells. Complete set of loading and cleaning implements. Mills' woven cartridge belt with shoulder straps. Gun and outfit are entirely new; worth \$25. Will exchange for Gaiter or Marlin repeating rifle model 1889, or sell for \$20. Reasons given for selling. D. H. SCHWABER, Ashtabula Harbor, Ohio.

*Exchange Notices Continued on next page.*

EXCHANGE NOTICES.—Continued.

TO EXCHANGE.—A good Baltimore, No. 1 printing press (self inker) with one font of type, and 2000 foreign stamps for first-class birds eggs in sets or singles. OSMUN LATROBE, Jr., 14 East Eager St., Baltimore, Md.

A WINCHESTER, single shot, plain sporting rifle, 28-55 cal., set trigger, Rocky Mountain sights and set of ideal reloading tools. All in good condition. Will exchange for desirable books on Natural History or Microscopy, choice Fossils or Sea Shells. J. W. GARBBER, Rockwell, Iowa.

WANTED.—Collectors having well prepared and carefully identified eggs, specimens or curiosities for sale or exchange at low rates, in large or small quantities, will please send their lists and prices. All eggs must be blown through one hole smoothly drilled in the side, and without stains or ink-marks. FRANK H. LATTIN, Albion, N. Y. (66)

RARE EGGS for exchange. I have for exchange the following eggs in full sets, with data: Limpkin, Chestnut-bellied Scaled Quail, Chauchadaca, Western Horned Owl, Harris' Hawk, White-winged Dove, Scissor Tail, Texas Night Hawk, Red-billed Pigeon, etc. THOMAS H. JACKSON, West Chester, Pa.

FOR EXCHANGE.—A collection of first and second-class bird eggs; 150 varieties; 800 eggs. Oologist for '84, '85, '86, '87 bound good as new; Also for '88 and '89 not bound; Also Davies 3rd Edition in good condition. Will dispose of the lot as a whole or in parts very cheap. Will exchange for good clean-lined breed leading shot gun or other eggs. For particulars, address FRANK L. KELLS, Winchester, Va.

TO EXCHANGE.—10 species woods for every Indian Knife, Scrapper, Arrows, War Clubs, Bird Arrows, Spear-head; 10 species for every Gray Ibis, Vase, Urn, Pitcher, Plate, Bowl, Stone H. Teller or Pipe; 20 species woods for Flute or Grape shot from war; 10 species for every War Bullet; 50 species for Canteen. FRED M. ROSS, Candor, N. Y.

WANTED.—A set of Taxidermist's instruments and supplies. In exchange, I will give about ten pounds of type that is in "pi." Will also exchange three eggs of No. 32 for Manton's "Taxidermy Without a Teacher." Address, L. C. FRIENY, Hillsville, Wicomico, Co., Md.

Back Numbers of THE OOLOGIST Wanted at Once

We want at once 50 copies of the June 1888 issue of THE OOLOGIST. For each copy we will give a card good for 12c payable in anything we advertise. We also want 50 copies of April, 1889 issue, for which we will give 6c worth of anything we advertise. Mail your extra copies at once to publisher of THE OOLOGIST, Albion N. Y.

ONLY 13 LEFT!

We have just 13 complete sets of YOUNG OOLOGIST and OOLOGIST left. A complete set will be sent you by return mail for only \$2.50. This offer is good for 30 DAYS ONLY.



Your name and address will be inserted in any department, 1 month for 10 cts.; 2 months, 25 cts.; 6 months, 40 cts.; 1 year, 75 cts. Should you desire to have your name printed in more than one department, one-half of these rates will be charged for each additional one.

Live collectors will not be long in observing the importance of keeping their names appearing in this Directory. Collectors and dealers desiring to make sales, purchases or exchanges will not only write to the parties whose names appear in this Directory for their wants, but will also keep them posted on "bargains" that they may have for sale cheap; publish their having papers, etc., that would be of interest to the persons whose names appear in this Directory, will recognize the importance of placing samples etc. in the hands of Live Collectors and will act accordingly.

Collectors receive as such as Fifty Letters, For sale, Cleaners, Samples etc. from having their names inserted one time at a cost of only 10 CENTS in this Directory. Address, THE OOLOGIST, Albion, N. Y.

BIRDS' EGGS.

- Chas. E. Cram, No. 410 Jefferson St., Burlington, Iowa. [J3
- H. W. Davis, North Granville, N. Y. [Y
- William T. Smith, Box 94, Wayne, Delaware Co., Pa. [Y
- Wm. Randall, Box 10, Belleville, Mich. [Y
- D. S. Musser, Aberdeen, South Dakota. [Y

TAXIDERMY.

- V. N. Marsh, Mount Union Coll., Alliance, Ohio. [Y
- William T. Smith, Box 94, Wayne, Delaware Co., Pa. [Y

INSECTS.

- Roy L. Lytle, Cedar Springs, Kent Co., Mich. [Y
- Eliot Field, Box 1, Wayne, Delaware Co., Pa. [Y

STAMPS.

- Fleming & Freeman, Box 174 and 1267, Natick, Mass. [U2

BIRD SKINS.

- V. N. Marsh, Lock Box 6, Mt. Union, Ohio. [n2
- William T. Smith, Box 94, Wayne, Delaware Co., Pa.

CURIOSITIES.

- Ed. VanWinkle, Box 10, Escanaba, Mich. [3n
- S. C. Wheeler, Waterbury Centre, Wash Co., Vt.
- F. M. Ross, Candor, N. Y.
- R. Waltz, Box 345, Green Castle, Putnam Co., Ind.

FOR SALE CHEAP.—A good collection of Californian eggs, sets and singles, all together or only part. List for stamp. Arthur Staley, Anaheim, Orange Co., California.

Cabinet Photos of a Dakota Sod Shanty

By mail post-paid 25c, 1 doz. for \$2.00. Address E. S. CHENEY, Pitrodie, So. Dakota.

## Breeding Habits of the Brown-headed Nuthatch.

While spending a few days in Queen Anne Co., Va., in the early part of last May, I had an opportunity of becoming personally acquainted with this little bird,\* which, up to that time, had only been known to me from dried skins and still drier descriptions.

The country in this vicinity is well covered with pine and oak trees, intersected in all directions by numerous small creeks and ponds. It is in the pine groves only, however, that the Nuthatches are found, and here their harsh cries are heard continually, for the birds never seem to remain quiet for any length of time and succeed in making so much noise that one believe them to be much more numerous than they really are. Their notes differ greatly from those of either the White or Red-breasted species and it was this peculiarity which first attracted my attention.

I soon discovered that to take any number of their nests, I should have to do a great deal of hard walking, as each pair of birds seemed to monopolize the whole of their particular grove for nesting purposes, a habit which I have also noticed in their White-breasted cousins.

Both birds seem to keep pretty much confined to the immediate vicinity of their home and their continued chatter makes the locality of the nest, which otherwise would be a difficult matter, comparatively easy.

The site chosen consisted invariably of a hole in a dead and rotten pine stump at a height varying from 6 to 12 feet from the ground, although I suppose they sometimes select much higher situations, as some of the stumps had likely looking excavations as high up as 40 feet.

The "woods were full" of these dead stumps and most of the stumps were full of holes made by the Downy Woodpeckers which were breeding all around and I think that most of the holes occupied by the Nuthatches were the deserted nests of this bird, although I cannot be positive on this point as all the nests were found completed and contained either eggs or young.

The nests themselves were flimsy affairs, the bottoms of the holes being simply covered to a depth of perhaps an inch with short broken bits of a certain, peculiar kind of flat grass. Of this stuff the birds seemed particularly fond, for it was found in all the nests, mixed with a few shreds of pine bark, the whole so loosely put together that it could not be removed entire, and thus presenting a singular contrast to a couple of the closely felted nests of the Caroling (?) Chickadee which were found, one with young just hatched, the other with 5 eggs too far advanced to save.

The breeding date seems to vary somewhat, for on the 7th day of May, I found a nest with young, partly fledged, a set of 5 incubated eggs and another set perfectly fresh but probably most of the nests would hold fresh eggs about the last of April.

All the nests were in the vicinity of water (although more were actually surrounded by it) and I did not even see a bird in the higher and dryer pine lands. All the sets consisted of 5 eggs.

Of the eggs in general no detailed description is necessary, but I wish to speak more particularly of the set of 5 incubated eggs referred to above, as they are quite unique. Four of the eggs are quite similar, white ground color, dusted all over with very minute dots of light purplish pink. The fifth egg is

very different as the spots are so close as to entirely hide the ground color, like some specimens of the Cactus Wren, and the whole egg presents a delicate light pinkish appearance. They are different from any eggs of this species that I have seen, including the Smithsonian series, and I value them very highly.

THEODORE W. RICHARDS,  
Washington, D. C.

### The Prairie Horned Lark in Monroe County, N. Y.

I have seen but very little in the pages of THE OOLOGIST, on the nesting of the Prairie Horned Lark in the United States, and, as I have found several nests, I write this article hoping it will be of interest to some of the readers of this interesting magazine. I have seen the bird here every month of the year except December. If one has ever been seen here in December it has not come to my knowledge. They fly over us northward from January until April. A few stay to breed and from September until December they fly South. In this locality the bird certainly breeds twice each season, as my experience will show. It is a singular fact that though I have found seven nests in the last three years, yet I know positively that no other collector in this vicinity has found a single nest. The earliest nest I have found was on the 23d of March, 1889. (It is quite probable that they sometimes lay earlier, as a friend of mine found a young bird in the latter part of April that could fly some.) It was placed in a hole, evidently made for the purpose by the bird, in a field that had been used as a pasture the fall before. It was made entirely of thistle down and was very dry and snug. The bird was on the nest when found. It contained three fresh eggs. They were greenish white spotted so thickly with blue and lavender as to give them a

cloudy appearance. On the 10th of April following I found another nest similarly situated and constructed. This contained three eggs like the first set which I took, but left the nest. On going back to the nest two days later I found another egg, but it had been frozen and cracked. After this I found no more nests until midsummer. On the 2nd of June I found a nest containing three fresh eggs. This was situated in a growing cornfield close under the edge of a sod, and was made very poorly of dead grass. On the 1st of July I found another nest in the same field containing four eggs; nest like the last. If the Horned Lark lays more than four eggs I would like to hear from some who has found a set of five through the columns of the THE OOLOGIST. I have found one set of two nearly hatched, the rest have all been sets of three and four. The average size is .87 x .65.

ERNEST SHORT.

### Winter Birds of Hennepin Co., Minn.

I do not intend to give a complete list but only some of our less common winter visitors, which have fallen under my notice:

Evening Grosbeak. Pentiful. Reside here all winter, feeding on box elder seeds. These birds are rarely found without the city, but prefer to remain within the limits. This makes it difficult to obtain them, still the air guns and "nigger shooters" enable one to obtain any reasonable number.

Bohemian Waxwing. Common at times. Winter visitor. This I think is one of our handsomest birds. This year are very rare. Last year common.

Northern Shrike. Arrive about November. Same habits as White-rumped. Fairly abundant.

Lapland Longspur. A few stray birds are found in large flocks of Snow Buntings. Easily distinguished from

Buntings by being darker. Habits same as the Snow Buntings.

Pine Siskin. Noticed in company with Redpolls.

Pileated Woodpecker. Found generally in tamarack woods. This large and wary woodpecker is very difficult to get. These birds are generally found far from civilization, and choose the wildest places for their retreats.

Gos Hawk. Rare. Observed several specimens, one of which was pursuing a flock of tame doves, which, despite his frantic efforts managed to elude him.

Pine Grosbeaks. Rare. Shot several males in red plumage.

White-winged Crossbill. Obtained several of these out of a flock which were feeding in the top of a tamarack tree.

Snowy Owl. Rare. One of these birds remained all of last winter on a rocky island in the river until I found it out, and the chances are that he will now remain for some time to come, in my cabinet. The Red-bellied Nuthatch, Brown Creeper, Barred Owl, Long-eared Owl, American Crossbill and Redpolls are common.

W. DE LA BARRE.

#### Collecting Experience.

May 6th, about 10:30 o'clock in the morning I left home intending to go to a small lake a couple of miles distant. I was going to look at some Grackle nests that I had found a few days previous. After walking along the road for about a mile, I climbed a fence and started across a field. I soon came upon a Mockingbird nest in a small bush. Taking these, I proceeded on a short distance and soon noticed a hole in a dead tree a little in advance of me that had a feather floating at the entrance. This looked rather suspicious, so striking the tree with my climbers I had the satisfaction of seeing a female Sparrow

Hawk fly out. On reaching the nest I found it to contain four incubated eggs. The nest at some remote time had evidently been a Flicker's nest, but of late years the Sparrow Hawks had had it as their home in the far side of the same field. I flushed a Florida Nighthawk from the ground and was agreeably surprised on looking down to see two eggs. When I blowed them I found them to be slightly incubated. I soon reached the lake and going round to the south side saw a Sparrow Hawk fly from an old stub and seeing a hole near the top concluded at once that it flew out of it. So strapping on my climbers I started up and hearing a noise above me, looked up and saw a Flicker leaving the hole. However, I went on up and got five eggs. They were not smooth like Woodpecker eggs usually are, but were exceedingly rough, something like Turtle eggs. I then went down to the lake, got an old boat and was bailing the water out when a young colored boy coming down for water hailed me. "Ha dere white man, haunt you de one dat gits bird eggs"? I of course answered in the affirmative and asked if he knew of any. "Yes saw, dere is a crow nest in dat big ole pine wonder, I jes no runded him of de nest when I hit de tree." That "big ole pine" was not so very big around, but was at least one hundred feet high. It was situated back up in the woods two or three hundred yards. I had to look at the nest a long time before I could make up my mind to climb it. But finally I could stand it no longer. As I saw the crow silently leave the nest and fly off over the tree tops, so up I went. The nest which was composed of sticks, twigs, grass, ect., and lined with cow hair contained five eggs. They were a great deal smaller than the common Crow eggs, and I am inclined to think they are eggs of the Fish Crow (*Corvus ossifragus*.) Putting three of the eggs in my mouth and taking two in my

hand I descended without mishap. I then went back to the boat and rowing out to the bushes in which the Grackle nests were situated, collected three sets of four and two sets of three eggs. Incubation was fresh in some, while in others it was well advanced. The Boat-tailed Grackle builds a large and bulky nest of straw which they weave to the bushes. In this is placed a quantity of soft mud, and without waiting for it to dry line the nest throughout with fine grass. The nest when built, thus is much deeper than when placed in trees on shore. The reason being that when built in the bushes if they were not deep the wind blowing the bushes about would cause the eggs to roll out. Landing the boat I started across lots home. While walking along I noticed a Sparrow Hawk fly down and grasping one of those striped lizzards that form a principal part of their food at this time a year fly to a dead tree. Knowing from the habits of this bird that if I would wait a little while I might be able to find its nest. I was right. In a minute or two he commenced calling and soon the female left her nest and flew to him for her dinner. The nest was about forty feet up and the dead tree in which it was placed was very hard to climb; but reaching it at last I was rewarded by finding five nice eggs. Going through an oat patch near home I found two Ground Dove nests; one containing two eggs the other two young. The nests were simply slight hollows scraped in the earth and lined with a few pieces of grass blades. I enjoyed my supper that night and of course went to bed like all other collectors to dream over the events of the day.

T. G. PEARSON,  
Alachua Co., Fla.

—  
The Snowy Owl.  
—

My request for information as to the winter home of the Snowy Owl (*Nyctea*

*nyctea*), appearing in your issue of Nov. 28, 1889, has brought me such a considerable volume of information from many willing correspondents that I am encouraged in attempting to further ascertain all I possibly can concerning this bird. I shall be exceedingly obliged to any one who will send me facts about the Snowy Owl, telling particularly of early, late or extreme southern appearances.

I suggest the following heads as convenient for grouping the information to be sent, and as outlining the ground I wish to cover:

1. Where and when you have seen the Snowy Owl.

2. What you know of the observations of others in your vicinity.

3. If these birds occur in about the same numbers annually with you, and if they arrive and depart on uniform dates.

4. Of any local or common names for this bird, also of names in other languages than English.

5. Of the cry of the Snowy Owl.

6. Food of this Owl; state if information is from examined stomachs.

7. Measurements and weights.

8. Plumage of adults, albinos or melanistic specimens.

9. If its flesh is ever used as food by man, or by other animals, *i. e.*, its enemies.

10. If at any time they are gregarious.

11. Nests; eggs; plumage of young.

12. Newspaper clippings.

13. Thermometrical and barometrical records bearing on the movements of this species.

14. Of the life of the Snowy Owl in confinement.

L. S. FOSTER,

35 Pine St., New York City.

December 12, 1889.

*From Forest and Stream, December 26th, 1889.*

[We trust the readers of THE COLO-

GIST will comply with Mr. Foster's request, as their notes and observations may be of considerable value to him.—  
Ed.]

#### An Albino Blue Jay.

While visiting a brother naturalist at Grinnell, Iowa, a short time since, he interested me considerably by bringing in a *white* Blue Jay. As it might interest some of the readers of the OOLOGIST, I will give a description of him. The Jay was presented to Mr. Wm. Berry, of Grinnell, Iowa, by his brother-in-law, Mr. Geo. B. Earp, of Monmouth, Ill. A neighbor of Mr. Earp found it in a nest in their front yard. When first hatched was perfectly white with pink eyes. There were three others in the nest, but they were blue like the parent bird. Is full grown now and in full plumage, which is all white except the wings and tail, which have a very light tinge of blue with a little darker shade of blue where it is black in other Jays; also a band of blue around topknot, with a little patch of blue at the base of bill, where it black in other Jays. Bill and legs perfectly white, eyes pink. He is confined in a cage but seems to enjoy himself as well as though at home in the woods.

R. D. Goss,  
New Sharon, Iowa.

#### Blackbirds by the Million.

I read with much interest the communication of Neil F. Posson, Medina, N. Y., and was especially impressed with it as I do not believe there is anything at all strange in it. The blackbirds are merely going to their roost which in some localities cover many hundreds of acres. Now as if in intentional contradiction of the intimation of Mr. Posson when he says "always North-east" on Sunday evening, Nov. 24, '89. I saw a drove of blackbirds numbering up among the hundreds of

thousands flying directly South-east. The black line reached from far in the N-W to the S-E, as far as the eye could reach, and they continued to come for over an hour, until after sundown. Tuesday morning during a driving rain the drove lessened at least two-thirds; came away from south-east and were going due north-east.

Nov. 27, '89.

W. L. McDANIEL,  
Mincola, Tex.

#### Nest of the Texan Bobwhite. (*Colinus virginianus texanus.*)

On the 12th of May, as I was carelessly sauntering across a meadow, I accidentally came across a nest of this species.

It was the most beautiful nest that I ever saw of this species, or I may well say, of any other kind. It was on the ground in grass about six inches high. The parent bird had made a depression in the ground, and had constructed her nest. The nest was oven shaped and made of grass closely interwoven. It was fastened firmly to the hole by being interwoven with the neighboring grass. It was situated about forty feet from the woods. I was not long exploring its contents. In it I found two eggs. I came back four days after, and two more eggs were in. This time I caught the parent bird on the nest, so there is no doubt to the identity. I came back five days later and found three more eggs in it. I came back twice to see if she had not finished the set, and finding both times there were no more eggs in it, and that the birds were gone. I took the seven eggs. They measured 1.18x.94, 1.19x.94, 1.20x.98, 1.22x.95, 1.48x.91, 1.49x.945, 1.53x.95.

The last one was twisted at the smaller end, It also has a bubble on the the smaller end, caused by a deficiency of lime. All the eggs are pyriform, but some, more than others.

LEWIS KNOX,  
Lee Co., Tex.

# THE OOLOGIST

EDITED AND PUBLISHED MONTHLY

—BY—

FRANK H. LATTIN, - ALBION, N. Y.

Correspondence and items of interest to the student of Birds, their Nests and Eggs, solicited from all.

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## A New Book.

Eggs of North American Birds by Chas. J. Maynard. 159 pages 10 full page hand colored plates by Mrs. Maynard, representing the eggs of 82 species. Boston: De Wolfe, Fiske & Co. 1890.

It is with pleasure that we announce this valuable work from the pen of this well-known Author and Naturalist but we too regret that it could not have been placed on the market at least a year or more ago for now owing to Davie's Work, Maynard's can only be expected to secure the patronage of collectors that can afford more than one work. We have not had the time to examine the text carefully, as yet, so can add no positive testimony as to the correctness of the descriptions, but owing to the author's standing as an oologist we have but little hesitancy in pronouncing it both reliable and accurate. It is a difficult matter to "pic-

ture an egg" to suit one that "lives among them" so that if we speak too harshly of the plates, it is trusted that we are excusable on that ground.

Plate I is excellent and is a credit to the Work. Some may think the Murre's egg too high colored, but then it is to be remembered that an egg of this species is of almost any color.

Plate II is fair and unquestionably much better than the writer could have produced. The balance of the ten plates are in our opinion "horrid" and as a work of reference they have a tendency to lower rather than increase its value. Perhaps one-half the eggs represented on the last eight plates are very fair but as to the other half, well, the writer had to look them up to find what they were intended to represent. We first "guessed" at what they were but almost invariably found ourselves "way off" and even now it is rather a "sticker" for us to believe that the egg intended to represent either the Red-tailed or Red-shouldered Hawk was not through an error numbered to represent the Limpkin.

The following description, which we copy in full, of well known species will give the readers of THE OOLOGIST an accurate idea of the plan and scope of the work:—

519. HOUSE FINCH, *Carpodacus mexicanus frontalis*. Eggs, 4 to 6, oblong oval, pale bluish green, sparingly dotted and lined with dark brown and black; .60 x .80 to .65 x .85. Nests placed in tree and bushes, composed of twigs, grass, and weeds, lined with soft grass and hair. Breeds in the middle of the United States, in May.

683. YELLOW-BREADED CHAT, *Icteria virens*. Eggs, usually 4, often 3, and rarely 5, oval, glossy white, spotted and blotched with reddish brown and lilac, often more thickly on the larger end, where there is sometimes a ring; .65 x .85 to .70 x .95. Closely resemble those of No. 674. Nests placed in bushes, composed of coarse grasses, leaves, and the stems of plants, lined with finer material. Breeds in Eastern United States west to the plains, from Georgia north to Ontario and Massachusetts, where it is locally distributed.



### The Blue Jay.

As one walks along through the woods on a summer day, he will invariably hear the well-known, but harsh cry of the Blue Jay; this bird is very abundant in almost all parts of the United States; they are somewhat gregarious in their feeding, but unusually solitary in their nesting habits; the nest of the Blue Jay is a very bulky affair, composed of twigs and an occasional rag; they always line their nest with string and fine roots; they lay from four to six eggs of a dull green color, spotted all over with blotches of olive-green. The only fault I have to find with this bird is its natural propensity for nest robbing. Most farmers consider this bird as a great nuisance, but in my estimation this is a mistaken idea, for the reason that the Blue Jay destroys innumerable insects that would otherwise eat up the crops. The Blue Jay is very pugnacious, often fighting with birds a great deal larger than itself. The Blue Jay is often confined in cages and I have heard that they can be learned to talk, but I have never heard one myself. I have noticed that the Blue Jay, in finding material for its nest, breaks dead twigs from the trees instead of picking them up from the ground. The majority of the Blue Jays pass the winter in the same vicinity as they do the breeding season.

H. E. HERSHEY,  
Otoe Co., Neb.

### Harris's Woodpecker in Nebraska.

Along the latter part of December, I was walking through a strip of timber about one-half mile west of town, when right in front of me, I heard the rapping of some Woodpecker. I walked nearer as silently as possible, when a Flicker flew up and away. I walked on more rapidly, then thinking that was all there was, when out jumped

what I thought at first sight, was a Downy Woodpecker. It lit on a stump about ten yards ahead of me and I could see it plainly. It was much too large for a Downy and I thought to dark for a Hairy. I watched it for almost an hour. It came quite near me several times, but flew away almost as soon as it saw me.

At last the mate (a male I think) came up and I saw them no more that day.

I went home not knowing what I had seen.

The following Thursday a traveling-man, who is quite a "bird crank," came around and I took him out. As soon as he laid eyes on my bird he said, "Boy, that's a Harris's Woodpecker." Well I was glad to hear that, for several of our local sages (?) had declared that I had only seen a Downy or perhaps a Hairy Woodpecker.

M. H. REED,  
Otoe Co., Neb.

### Unusual Nesting of the Downy Woodpecker.

As the editor of the OOLOGIST asks, among other things, for articles on peculiarities of the nesting of our birds, I will give an instance of unusual nesting of the Downy Woodpecker.

On April 23, I found a Yellow-shafted Flicker's nest, apparently finished in a rotten stub of an apple tree in an old orchard. As I was passing the orchard June 10, I went to the tree and found the upper part of the stub had been broken off, leaving the hole open. I looked inside and saw three pure white fresh eggs measuring 80 x 60 lying on a rather bulky nest of grass stalks and horse hair, the latter being pretty well distributed through the grass and not in any way forming a lining to the nest. The nest is rather shallow and loosely made. I took the eggs and nest, and the birds immediately made another nest, and hid more eggs which

were robbed several times by rascally boys.

On July 4th, I heard the bird had made a third nest, and had laid four eggs. I visited it the next day and found it to contain two eggs and one young bird. The nest in this case exactly resembled the first.

During all this time neither the boys nor myself saw any bird near the nest, so I am not positive as to the identification being correct, but I think they could be nothing else except white eggs of the Blue Bird, which I think is not likely, as the eggs are smaller, and Blue Birds usually stay near their nest when it contains eggs.

J. C. GALLOWAY,  
Hamilton Co., Ohio.

#### Evening Grosbeak.

I found a flock of about fifty in a long bushy swale, through which a small creek flowed. When first discovered many were on the ground; although the greater number were engaged in devouring the red berries that grew plentifully on the bushes. On my approach those on the ground flew into the trees uttering an alarm like an exaggerated note of the cherry bird. I was very much surprised to find none but females; not a male in sight, although I hunted the valley through.

Next day on returning to the same place I found another flock, slightly less in numbers than the one seen on the previous day, but consisting entirely of males old and young. Determined to sift the matter to the bottom I hunted the whole country over and at last in a patch of woods I discovered the recreant troop of females. I heard one bird sing; he started out with a thin quavering warble, suddenly increasing in power and as suddenly bringing up as though out of breath. These are not such cold weather birds as has generally been supposed.

I have seen small bands in this county as late as May 13th.

This bird seems to be the height of stupidity, the indifference it manifests when its companions are shot down, its slow movements and meditative posture give the false idea of its intellectual powers. Take them when they are unaware of your presence and they form a lively, pleasant party, busily searching for food.

STEWART E. WHITE,  
Kent Co., Mich.

#### Blue-gray Gnatcatcher and Tufted Tit in Belmont County, Ohio.

May 17th. Found seven nests of Blue-gray Gnatcatcher. Took two sets of four. Visited the remaining nest in ten days and found two contained sets of four and the others four young each.

This is the first time I have taken eggs of this species and I believe the first time they have been taken in this county.

The nest of these birds is a beautiful structure, composed of the red catkins of the willow and covered with star shaped lichens, fastened to the next by means of spiders web. The cavity, in which the eggs were placed, was lined with thistle down and vegetable fibre. These birds are not particular about the site of their nests. I found them in beech and maple trees and as high up as fifty feet and found one nest in an apple tree ten feet from the ground. The nests were always placed on small dead branches near the tops of the trees; I believe four is the usual number of eggs in a set in this locality.

May 2nd. Took a set of six Tufted Tit. Nest placed in a natural cavity of an apple tree one foot from the ground composed of a mass of grass and leaves, lined with hair and snake skin. On May 1st of '88, I took the first eggs of this species ever collected in this locality. I took three sets of five, six and seven eggs. Is not seven an unusual number? Nests of this species always contain pieces of snake skins.

FRED JONES.

~◉A COMPLETE LIST◉~

—OF—

# THE BIRDS OF NORTH AMERICA,

Arranged according to the A. O. U. Check List,

With values for 1890 given for the Skins of each species as far as known. Collectors should adopt this list as a basis for making all exchanges, as it is the latest list published and the prices quoted have received the approval of the best American authorities. Any American dealer will fill orders for Skins at the prices quoted.

Duplicate copies of this *Oologist* can be obtained from the publisher at 4 cents per copy, 3 copies for 10 cents, 10 for 30 cents, 100 for \$2.50. Every collector should have at least a few extra copies.

The numbers in the first column correspond to the A. O. U. Check List of North American Birds revised; those in the second column to Ridgway's Nomenclature.

		SKINS				SKINS			
1	729	Western Grebe . . . . .	\$1 25	\$2 00	61	680	Caspian Tern . . . . .	\$4 50	\$2 50
2	731	Holboell's Grebe . . . . .	1 50	2 50	65	681	Royal Tern . . . . .	1 25	2 00
3	732	Horned Grebe . . . . .	75	1 50	66	682	Elegant Tern . . . . .		
4	733a	American Eared Grebe . . . . .	1 00	1 50	67	683	Carot's Tern . . . . .		25 2 00
5	734	St. Domingo Grebe . . . . .	1 50	2 00	[68]	684	Trudeau's Tern . . . . .		
6	735	Pied-billed Grebe . . . . .	75	1 25	69	685	Forster's Tern . . . . .	75	1 00
7	736	Loon . . . . .	2 60	4 00	70	686	Common Tern . . . . .	50	1 00
8	737	Yellow-billed Loon . . . . .			71	687	Arctic Tern . . . . .	75	1 00
9	738	Black-throated Loon . . . . .	4 00	7 00	72	688	Roseate Tern . . . . .	75	1 25
10	739	Pacific Loon . . . . .	4 00	6 00	73	689	Alentian Tern . . . . .	2 00	3 00
11	740	Red-throated Loon . . . . .	1 50	3 00	74	690	Least Tern . . . . .	60	1 25
12	745	Tufted Puffin . . . . .	1 50	2 50	75	691	Sooty Tern . . . . .	1 25	2 50
13	743'	Puffin . . . . .	1 25	2 00	[76]	692	Bridle-d Tern . . . . .	2 00	3 00
13a	743a	Large-billed Puffin . . . . .			77	693	Black Tern . . . . .	60	1 25
14	744	Horned Puffin . . . . .	3 50	4 50	[78]	694	White-winged Black Tern . . . . .	1 50	2 00
15	746	Rhinoceros Anklet . . . . .			79	695	Noddy . . . . .	2 00	3 00
16	751	Cassin's Anklet . . . . .			80	696	Black Skimmer . . . . .	50	1 50
17	747	Paroquet Anklet . . . . .	3 00	5 00	81	709	Black-footed Albatross . . . . .		
18	748	Crested Anklet . . . . .	3 50	4 50	82	701	Short-tailed Albatross . . . . .	6 00	8 00
19	749	Whiskered Anklet . . . . .	3 00	4 50	[83]	702	Yellow-nosed Albatross . . . . .		
20	750	Least Anklet . . . . .			84	703	Sooty Albatross . . . . .		
21	753	Ancient Murrelet . . . . .			[85]	704	Giant Fulmar . . . . .		
	759				86	705	Fulmar . . . . .	3 00	4 50
23	755	Marbled Murrelet . . . . .			86a		Lesser Fulmar . . . . .		
24	756	Kittlitz's Murrelet . . . . .			[86b]	705a	Pacific Fulmar . . . . .		
25	757	Xantus's Murrelet . . . . .			86c	705b	Slender's Fulmar . . . . .		
26	758	Craveri's Murrelet . . . . .			87	706	Slender-billed Fulmar . . . . .		
27	760	Black Guillemot . . . . .	1 00	2 00	88		Cory's Shearwater . . . . .	3 00	5 00
28	760	Mandt's Guillemot . . . . .	2 00	3 50	89	709	Greater Shearwater . . . . .	1 50	2 50
29	751	Pigeon Guillemot . . . . .	1 50	2 00	[90]	711	Manx Shearwater . . . . .	2 50	3 00
30	763	Murre . . . . .	1 00	2 00	91	710	Pink-footed Shearwater . . . . .		
30a	763a	California Murre . . . . .	1 50	2 00	92	712	Andulon's Shearwater . . . . .	3 00	4 00
31	764a	Brunnich's Murre . . . . .	1 00	2 00	93	713	Black-vented Shearwater . . . . .		
31a	764	Pallas's Murre . . . . .			94	714	Sooty Shearwater . . . . .	3 00	4 00
32	742	Razor-billed Auk . . . . .	1 50	2 00	95	715	Dark-bodied Shearwater . . . . .		
33	741	Great Auk (cast of egg) . . . . .			96	716	Slender-billed Shearwater . . . . .		
34	752	Dovekie . . . . .	1 00	1 50	[97]	707	Black-tailed Shearwater . . . . .		
35	696	Skua . . . . .	3 50	5 00	[98]	717	Black-capped Petrel . . . . .		
36	697	Pomarine Jaeger . . . . .	2 00	3 50	[99]		Sealed Petrel . . . . .		
37	648	Parasitic Jaeger . . . . .	1 25	2 00	100		Fisher's Petrel . . . . .		
38	699	Long-tailed Jaeger . . . . .	2 50	3 50	[101]	718	Bulwer's Petrel . . . . .		
39	657	Ivory Gull . . . . .	3 75	4 50	[102]	719	Pintado Petrel . . . . .		
40	658	Kittiwake . . . . .	75	1 50	103	720	Least Petrel . . . . .	3 00	5 00
40a	658a	Pacific Kittiwake . . . . .	1 25	2 50	104	721	Stormy Petrel . . . . .	1 50	3 00
41	659	Red-legged Kittiwake . . . . .			105	726	Fork-tailed Petrel . . . . .	2 50	4 00
42	660	Glaucous Gull . . . . .	2 00	4 00	106	723	Leach's Petrel . . . . .	1 00	1 25
42.1		Point Barrow Gull . . . . .			106.1		Guadaloupe Petrel . . . . .		
43	661	Leeland Gull . . . . .	3 00	4 00	107	724	Black Petrel . . . . .		
44	662	Glaucous-winged Gull . . . . .	2 00	3 00	108	725	Ashy Petrel . . . . .		
45		Kumlien's Gull . . . . .			109	722	Wilson's Petrel . . . . .	1 00	1 50
46		Nelson's Gull . . . . .			[110]	728	White-bellied Petrel . . . . .		
47	663	Great Black-backed Gull . . . . .	2 00	3 00	[111]		White-faced Petrel . . . . .		
48		Slaty-backed Gull . . . . .			112	654	Yellow-billed Tropic Bird . . . . .	3 50	5 00
49	664	Western Gull . . . . .	2 00	3 00	113	655	Red-billed Tropic Bird . . . . .	3 50	5 00
[50]	665	Siberian Gull . . . . .			[114]	651	Blue-faced Booby . . . . .		
51	666	Herring Gull . . . . .	1 50	2 00	114.1		Blue-footed Booby . . . . .		
51a	666a	American Herring Gull . . . . .	1 50	2 00	114.2		Cory's Booby . . . . .	3 00	5 00
52	667	Vega Gull . . . . .			115	652	Booby . . . . .		
53	665	California Gull . . . . .	1 50	2 00	115.1		Brewster's Booby . . . . .		
54	663	Ring-billed Gull . . . . .	1 50	2 00	[116]	653	Red-footed Booby . . . . .		
55	670	Short-billed Gull . . . . .	2 00	3 00	117	650	Gannet . . . . .	3 00	4 00
[56]	671	Mew Gull . . . . .	1 25	1 75	118	649	Anhinga . . . . .	2 00	3 50
57	672	Heermann's Gull . . . . .	3 50	5 00	119	612	Cormorant . . . . .	3 00	3 50
58	673	Laughing Gull . . . . .	1 50	2 00	120	643	Double-crested Cormorant . . . . .	2 00	3 00
59	674	Franklin's Gull . . . . .	2 00	3 00	[20a]	643	Florida Cormorant . . . . .	1 50	2 50
60	675	Bonaparte's Gull . . . . .	75	1 50	[20b]	643b	White-crested Cormorant . . . . .		
60.1		Little Gull . . . . .			120c		Farrallone Cormorant . . . . .		
61	676	Ross's Gull . . . . .			1.1	644	Mexican Cormorant . . . . .	2 00	3 00
62	677	Sabine's Gull . . . . .	1 00	5 00	1.2	645	Brandt's Cormorant . . . . .	1 75	3 50
63	679	Gull-billed Tern . . . . .	1 00	1 50	1.3		Pelagic Cormorant . . . . .		

## SKINS

123a 646	Violet-green Cormorant	\$3 00	\$4 00
123b 646a	Baird's Cormorant	2 00	3 50
124 647	Red-faced Cormorant		
125 640	American White Pelican	6 00	8 00
126 641	Brown Pelican	3 00	5 00
127	California Brown Pelican	3 00	6 00
128 639	Man-o'-War Bird	4 00	6 00
129 636	American Merganser	1 25	1 75
130 637	Red-breasted Merganser	1 00	1 50
131 633	Hooded Merganser	1 00	2 00
132 601	Mallard	1 25	1 75
133 602	Black Duck	1 25	1 75
134 603	Florida Duck	1 50	2 50
135 604	Gadwall	1 25	2 00
136 606	Widgeon	1 50	2 00
137 607	Baldpate	1 50	2 00
[138] 611	European Teal	1 50	2 00
139 612	Green-winged Teal	1 00	1 50
140 609	Blue-winged Teal	75	1 25
141 610	Cinnamon Teal	1 50	2 00
142 608	Shoveller	1 25	2 00
143 605	Pintail	1 50	2 00
144 613	Wood Duck	1 50	2 50
[145]	Rufous-crested Duck	2 00	2 75
146 618	Redhead	1 50	2 50
147 617	Canvas-back	1 50	2 50
148 614	American Scaup Duck	1 50	2 00
149 615	Lesser Scaup Duck	1 50	2 00
150 616	Ring-necked Duck	1 25	1 75
151 620	American Golden-eye	1 25	1 75
152 619	Barrow's Golden-eye	1 50	2 25
153 621	Buffle-head	1 00	1 50
154 623	Old-squaw	1 00	2 00
155 622	Harlequin Duck	1 50	3 00
156 624	Labrador Duck		
157 625	Steller's Duck	4 00	6 00
158 626	Spectacled Eider		
159 627	Greenland Eider	2 50	3 50
160 627a	Amer can Eider	2 00	3 00
161 628	Pacific Eider	2 00	4 00
162 629	King Eider	5 00	7 00
163 630	American Scoter	1 50	2 25
[164] 631	Velvet Scoter	2 00	2 50
165 632	White-winged Scoter	2 00	2 50
166 633	Surf Scoter	1 75	2 25
167 634	Ruddy Duck	75	2 00
[168] 635	Marek Duck		
169 591a	Lesser Snow Goose	3 00	4 00
169a 591	Greater Snow Goose	3 00	4 00
169.1 590	Blue Goose	3 00	4 00
170 592	Ross's Snow Goose	4 50	6 00
[171] 593	White-fronted Goose	2 50	3 50
171a 593a	Amer. White-fronted Goose	2 70	3 50
172 594	Canada Goose	2 70	3 50
172a 544a	Hutchin's Goose	2 50	3 50
172b 544c	White-cheeked Goose	3 50	4 50
172c 544b	Cackling Goose		
173 595	Brant	2 00	3 00
174 596	Black Brant	3 00	4 00
[175] 597	Barnacle Goose	3 00	3 50
176 598	Empuror Goose	11 00	15 00
177 599	Black-bellied Tree-duck	2 00	3 50
178 900	Fulvous Tree-duck	2 00	3 50
[179] 81	Whooping Swan	8 00	10 00
180 888	Whistling Swan	5 00	7 00
181 89	Trumpeter Swan	5 00	8 00
182 585	Amer can Flamingo	8 00	15 00
183 505	Roseate Spoonbill	2 00	7 00
184 501	White Ibis	1 70	3 00
[185] 502	Scarlet Ibis	5 00	8 00
186 503	Glossy Ibis	2 50	3 50
187 504	White-faced Glossy Ibis	2 70	3 50
188 500	Wood Ibis	3 00	6 00
[189] 999	Jabiru	1 00	1 50
190 497	American Bittern	75	1 50
191 498	Least Bittern		
191.1	Gray Least Bittern		
192 486	Great White Heron	10 00	15 00
193	Ward's Heron	3 00	5 00
194 487	Great Blue Heron	2 00	4 00
[195] 488	European Blue Heron	2 00	2 50
196 489	Amer can Egret	2 00	3 50
1 97 490	Snowy Egret	2 00	3 50
198 491	Red-b. Egret	1 70	2 25
1 99 492	Louisiana Heron	75	1 25
200 493	Little Blue Heron	1 00	1 50
201 494	Green Heron	60	1 00
201.1	Frazar's Green Heron		
202 495	Black-crowned Night Heron	1 00	1 50
203 496	Yellow-crowned Night Heron	1 50	2 50

## SKINS

204 582	Whooping Crane	\$8 00	\$18 00
205 584	Little Brown Crane	4 00	6 00
206 583	Sandhill Crane	4 00	6 00
207 581	Lampkin	2 00	3 50
208 569	King Rail	1 00	1 50
209	Belding's Rail		
210 570	California Clapper Rail	1 50	2 50
211 571	Clapper Rail	75	1 00
211a 571a	Louisiana Clapper Rail	75	1 50
211b	Scott's Rail	1 00	1 50
211c	Caribbean Clapper Rail		
212 572	Virginia Rail	50	75
[213] 573	Spotted Crane	1 25	1 50
214 574	Sora	24	60
215 575	Yellow Rail	2 00	3 00
216 576	Black Rail	3 00	5 00
216a 576a	Farallone Rail		
[217] 577	Corn Crane	75	1 25
218 578	Purple Gallinule	1 00	2 00
219 579	Florida Gallinule	50	1 00
[220]	European Coot	1 00	1 25
221 580	American Coot	50	1 00
222 563	Red Phalarope	2 00	3 50
223 564	Northern Phalarope	75	1 50
224 565	Wilson's Phalarope	75	1 00
225 566	American Avocet	1 00	2 00
226 567	Black-necked Stilt	1 00	1 50
[227] 524	European Woodcock	1 75	2 25
228 525	American Woodcock	1 75	1 50
[229] 526	European Snipe	1 00	1 25
250 526a	Wilson's Snipe	50	75
231 527	Dowitcher	60	1 00
232 527a	Long-billed Dowitcher	60	1 00
233 528	Stilt Sandpiper	75	1 25
234 529	Knot	50	1 00
235 530	Purple Sandpiper		
236 531	Acadian Sandpiper	40	60
237 532	Prybilof Sandpiper		
238 533	Sharp-tailed Sandpiper		
239 534	Pectoral sandpiper	30	50
240 536	White-rumped Sandpiper	50	75
241 537	Baird's Sandpiper	60	1 00
242 538	Least Sandpiper	20	30
242.1	Long-toed Stint		
[243] 550	Dunlin	1 00	1 50
243a 539a	Red-backed Sandpiper	35	75
244 540	Curlew Sandpiper	1 00	1 50
[245] 542*	Spoon-bill Sandpiper		
246 541	Semipalmated Sandpiper	25	40
247 541a	Western Sandpiper	75	1 00
248 542	Sanderling	35	75
249 543	Marbled Godwit	1 00	1 50
250 544	Pacific Godwit	3 00	4 70
251 545	Hudsonian Godwit	1 00	1 75
[252] 546	Black-tailed Godwit	1 25	1 50
[253] 547	Green-shank	1 25	2 00
254 548	Greater Yellow-legs	75	1 00
255 549	Yellow-legs	50	75
256 550	Soft-ray Sandpiper	25	75
[257] 51	Green Sandpiper	1 25	2 00
258 552	Willet	75	1 70
258.5 52	Western Willet	75	1 70
259 553	Wandering Tattler	1 50	2 70
[260] 554	Rail	1 25	1 70
261 555	Bartramian Sandpiper	75	1 00
262 556	Buff-breasted Sandpiper	1 00	1 50
263 557	Spotted Sandpiper	20	40
264 558	Long-billed Curlew	1 50	2 00
265 559	Hudsonian Curlew	1 00	1 50
266 560	E-kimo Curlew	1 00	2 00
[267] 561	Whimrel	1 00	1 50
[268] 562	Bristle-thighed Curlew		
[269] 512	Lapwing	1 00	1 50
270 513	Black-bellied Plover	75	2 00
[271] 514	Golden Plover	1 25	2 00
272 515	American Golden Plover	75	2 00
272a 515a	Pacific Golden Plover	1 50	2 50
273 516	Killdeer	30	75
274 517	Semipalmated Plover	25	40
275 518	Ring Plover	75	1 00
[276] 519	Little Ring Plover	1 00	1 25
277 520	Piping Plover	50	75
277a 520a	Belted Piping Plover	50	1 00
278 521	Snowy Plover	75	2 00
[279]	Monzolian Plover		
279 522	Wilson's Plover	50	75
281 523	Mountain Plover	1 00	1 50
282 541	Song Bird	1 50	2 50
283 569	Turnstone	30	1 00
284 519	Black Turnstone	1 00	1 50

		SKINS			SKINE	
285] 506	Oyster-catcher . . . . .	\$1 25	\$1 50	347a 447	Amer. Pough-legged Hawk	\$1 25 52 53
286 507	American Oyster-catcher	1 00	1 50	348 +8	Ferruginous Kough-leg .	2 00 3 00
286.1	Frazar's Oyster-catcher			350 449	Golden Eagle . . . . .	6 00 10 00
287 508	Black Oyster-catcher	2 00	3 00	[350] 450	Hairy Eagle . . . . .	6 00 12 00
[288] 568	Mexican Jacana	1 00	2 00	[351] 452	Gray Sca Eagle . . . .	6 00 8 00
289 480	Bob-white . . . . .	40	1 00	352 451	Bald Eagle . . . . .	3 00 8 00
289a 480a	Florida Bob-white	50	1 00	353 412	White Gyrfalcon . . . . .	10 00 15 00
289b 480b	Texas Bob-white . . . .	50	75	354 412a	Gray Gyrfalcon . . . . .	10 00 15 00
289c	Cuban Bob-white . . . .	3 00	4 00	354a 412b	Gyrfalcon . . . . .	10 00 15 00
291	Masked Bob-white . . . .	2 50	5 00	354b 412c	Black Gyrfalcon . . . . .	10 00 15 00
292 481	Mountain Partridge . . .	1 00	1 50	355 413	Prairie Falcon . . . . .	1 50 3 00
292a 481a	Plumbe Partridge . . . .	1 00	1 50	356 414	Buck Hawk . . . . .	1 50 3 00
293 484	Scaled Partridge . . . .	75	1 00	356a 414a	Peule's Falcon . . . . .	
293a	Chestnut-bellied Scaled Partridge . . . . .	50	75	357 417	Light Hawk . . . . .	40 1 00
294] 482	California Partridge . . .	50	1 00	357a 417a	Black Merlin . . . . .	2 00 3 50
294a	Valley Partridge . . . . .	75	1 00	358 418	Richardson's Merlin . . .	1 75 2 50
295 483	Gambel's Partridge . . . .	1 00	1 50	[358.1]	Merlin . . . . .	1 25 1 75
296 485	Masseua Partridge . . . .	2 50	5 00	359 419	Aplomado Falcon . . . . .	
297 471	Dusky Grouse . . . . .	3 00	4 00	359.1 422	Kestrel . . . . .	1 60 1 50
297a 471a	Sooty Grouse . . . . .	3 00	4 00	360 423 423a	American Sparrow Hawk.	40 1 00
297b 471b	Richardson's Grouse . . .	3 00	4 00	[361] 421	Cuban Sparrow Hawk . . .	
298 472	Canada Grouse . . . . .	3 00	4 00	362 423	Audubon's Caracara . . .	1 50 3 00
299 472a	Franklin's Grouse . . . .	1 00	1 50	363 424	Guadalupe Caracara . . .	
300 473	Ruffed Grouse . . . . .	75	1 25	364 425	American Osprey . . . . .	2 00 3 00
300a	Canadian Ruffed Grouse . .	1 00	1 25	365 394	American Barn Owl . . .	2 00 3 00
300b 472a	Gray Ruffed Grouse . . . .	2 00	3 00	366 395	American Long-eared Owl .	75 1 50
300c 473b	Oregon Ruffed Grouse . . .	1 75	2 25	367 396	Short-eared Owl . . . . .	75 1 25
301 474	Willow Ptarmigan . . . . .	1 50	1 75	368 397	Barred Owl . . . . .	1 00 1 50
301a	Allen's Ptarmigan . . . . .	1 50	1 75	368a 397a	Florida Barred Owl . . .	1 75 3 25
302 475	Rock Ptarmigan . . . . .	2 00	3 00	369 398	Spotted Owl . . . . .	
302a	Reinhardt's Ptarmigan . . .			370 399	Great Gray Owl . . . . .	7 00 8 00
302b	Nelson's Ptarmigan . . . .			[370a] 399a	Lapp Owl . . . . .	
302c	Turner's Ptarmigan . . . .			371 400	Richardson's Owl . . . . .	2 00 3 00
303	Welch's Ptarmigan . . . . .			372 401	Saw-whet Owl . . . . .	1 00 1 50
304 476	White-tailed Ptarmigan . . .	2 00	3 00	373 402	Screech Owl . . . . .	75 1 25
305 477	Prairie Hen . . . . .	1 00	1 25	373a 402a	Florida Screech Owl . . .	1 00 1 15
306 477	Heath Hen . . . . .			373b 402b	Texas Screech Owl . . . . .	1 00 1 50
307 477a	Lesser Prairie Hen . . . .	1 50	2 25	373c	California Screech Owl . . .	1 00 1 50
308 478	Sharp-tailed Grouse . . . .	2 00	3 00	373d 492d	Kennedy's Screech Owl . . .	1 25 2 00
308a 478a	Columb. Sharp-tailed Grouse .	1 00	1 50	373e 492e	Rocky Mountain Screech Owl.	1 50 2 00
308b	Prairie Sharp-tailed Grouse .	2 00	3 00	373f 403	Mexican Screech Owl . . .	1 50 2 00
309 479	Sage Grouse . . . . .	3 00	5 00	374 404	Flammulated Screech Owl .	
310 470a	Wild Turkey . . . . .	6 00	8 00	375 405	Great Horned Owl . . . . .	2 00 3 00
310a 470	Mexican Turkey . . . . .	6 00	8 00	375a 405a	Western Horned Owl . . .	2 50 3 50
311 469	Chachalaca . . . . .	6 00	8 00	375b 405b	Aretic Horned Owl . . . .	6 00 15 00
312 456	Band-tailed Pigeon . . . . .	1 25	1 50	375c 405c	Dusky Horned Owl . . . . .	4 00 8 00
312a	Viosea's Pigeon . . . . .	2 00	3 00	376 406	Snowy Owl . . . . .	6 00 8 00
313 457	Red-billed Pigeon . . . . .	1 00	2 00	[377] 407a	Hawk Owl . . . . .	2 50 3 00
314 458	White-crowned Pigeon . . .	1 50	3 00	377a 407	American Hawk Owl . . . .	2 00 3 00
315 459	Passenger Pigeon . . . . .	1 50	3 00	378 408	Burrowing Owl . . . . .	75 1 00
316 460	Mourning Dove . . . . .	25	75	378a 408a	Florida Burrowing Owl . . .	2 00 4 00
317 462	Zenaida Dove . . . . .	2 00	3 50	379 409	Pygmy Owl . . . . .	1 50 2 50
318 463	White-fronted Dove . . . .	1 50	2 50	379a 409	California Pygmy Owl . . . .	1 50 2 50
319 464	White-winged Dove . . . .	1 00	2 00	379.1	Hoskin's Pygmy Owl . . . . .	8 00 19 00
320 465	Ground Dove . . . . .	30	75	380 410	Ferruginous Pygmy Owl . . .	4 00 6 00
320a 465	Mexican Ground Dove . . . .	50	1 00	381 411	Elf Owl . . . . .	2 00 3 00
321 466	Inca Dove . . . . .	75	1 50	382 392	Carolina Paroquet . . . . .	2 50 5 00
[322] 467	Key West Quail-Dove . . . .	3 00	5 00	[383] 389	Ani . . . . .	1 50 2 00
[323] 468	Blue-headed Quail Dove . . .			384 390	Groove-billed Ani . . . . .	1 50 2 25
324 453	California Vulture . . . . .			385 385	Road-runner . . . . .	15 1 50
325 454	Turkey Vulture . . . . .	2 00	2 50	386 386	Mangrove Cuckoo . . . . .	1 50 2 50
326 455	Black Vulture . . . . .	2 50	3 50	386a 386a	Maynard's Cuckoo . . . . .	2 00 3 00
327 436	Swallow-tailed Kite . . . . .	2 50	4 00	387 387	Yellow-billed Cuckoo . . . . .	30 60
328 427	White-tailed Kite . . . . .	2 50	4 00	387 387	California Cuckoo . . . . .	50 75
329 428	Mississippi Kite . . . . .	2 50	3 50	388 388	Black-billed Cuckoo . . . . .	30 50
330 429	Everglade Kite . . . . .	4 00	6 00	[388] 384	Courtesy-tailed Trogon . . . .	2 00 5 00
331 439	Marsh Hawk . . . . .	40	2 50	390 382	Scated Kingfisher . . . . .	25 50
332 432	Sharp-shinned Hawk . . . . .	40	75	391 383	Texas Kingfisher . . . . .	1 50 2 50
333 431	Cooper's Hawk . . . . .	1 50	3 00	392 393	Ivory-billed Woodpecker . . . .	7 00 15 00
334 433	American Goshawk . . . . .	40	1 00	393 360	Hairy Woodpecker . . . . .	20 30
334a 433a	Western Goshawk . . . . .	1 50	3 50	393a 360a	Northern Hairy Woodpecker . . .	20 30
335 434	Harris's Hawk . . . . .	3 00	4 00	393b 360b	Southern Hairy Woodpecker . . .	20 30
[336] 435	European Buzzard . . . . .	1 50	2 00	393c 360c	Harris's Woodpecker . . . . .	50 75
337 436	Red-tailed Hawk . . . . .	1 50	2 00	393d 360d	Cabanis's Woodpecker . . . . .	40 75
337a 436a	Krider's Hawk . . . . .	75	1 50	394 361	Downy Woodpecker . . . . .	15 25
337b 436b	Western Red-tail . . . . .	1 00	1 75	394a 361a	Gardner's Woodpecker . . . . .	30 45
337c 436c	Saint Lucas Red-tail . . . . .			394d	Smoky Woodpecker . . . . .	50 1 00
338 438	Harlan's Hawk . . . . .	3 00	5 00	395 362	Red-cockaded Woodpecker . . .	40 50
339 439	Red-shouldered Hawk . . . .	1 00	1 75	396 363	Baird's Woodpecker . . . . .	40 75
339a	Florida Red-shouldered Hwk,	1 00	1 75	397a 363a	Saint Lucas Woodpecker . . . .	1 00 1 50
339b 439b	Red-bellied Hawk . . . . .	1 00	1 75	397 364	Nuttall's Woodpecker . . . . .	1 00 1 50
340 449	Zone-tailed Hawk . . . . .	2 00	3 00	3 8 365	Arizona Woodpecker . . . . .	1 50 2 00
341 441	White-tailed Hawk . . . . .	2 00	4 00	3 9 365	White-headed Woodpecker . . . .	1 00 1 50
342 442	Swainson's Hawk . . . . .	2 00	3 50	400 367	Aretic Three-toed Woodpcker,	50 75
343 443	Broad-winged Hawk . . . . .	1 50	2 50	401 368	Amer. Three-toed Woodpecker . . .	2 00 2 50
[344]	Short-tailed Hawk . . . . .	1 00	1 75	401a	Alaskan Three-toed Woodp'kr.	
345 444	Mexican Black Hawk . . . . .			401b 368a	Alpine Three-toed Woodp'kr . . .	1 50 2 00
346 445	Mexican Goshawk . . . . .	4 00	5 00	402 399	Yellow-billed Sapsucker . . . .	20 40
[347]	Rough-legged Hawk . . . . .	2 00	3 00	402a 369a	Red-naped Sapsucker . . . . .	50 75
		2 00	2 50	403 369b	Red-breasted Sapsucker . . . . .	75 1 00

		SKINS				SKINS	
404	370	Williamson's Sapsucker	51	00	81	50	
405	371	Pileated Woodpecker	40	1	00		474b Texan Horned Lark \$ 30 50
406	372	Red-headed Woodpecker	25	10			79c 300b Mexican Horned Lark 30 50
407	373	California Woodpecker	35	50			74f Ruddy Horned Lark 30 50
407a	373a	Narrow-fronted Woodpecker	35	50			4g Streaked Horned Lark 30 50
408	376	Lewis's Woodpecker	40	1	25		57c 286 American Magpie 75 1 00
409	372	Red-bellied Woodpecker	75	1	00		47e 287 Yellow-billed Magpie 1 00 1 50
410	373	Golden-fronted Woodpecker	25	40			57f 289 Blue Jay 20 30
411	374	Gila Woodpecker	25	50			4 7 Florida Blue Jay 25 35
412	378	Flicker	75	1	00		47c 90 Steller's Jay 1 25 1 75
413	378b	Red-shafted Flicker	25	35			47e Coast Jay 1 00 1 50
413a		Northwestern Flicker	40	50			478 290a Blue-fronted Jay 40 60
414	379	Gilded Flicker	45	60			478e 290b Long-crested Jay 40 60
415	380	Guadalupe Flicker	40	60			478c 290b Black-headed Jay 40 60
416	353	Chuck-will's-widow	1	50	2	00	479 291 Florida Jay 55 50
417	354	Whip-poor-will	60	1	00		480 292 Woodhouse's Jay 1 00 1 50
417a		Stephen's Whip-poor-will	3	00	4	00	481 293 California Jay 35 50
418	355	Poor-will	1	50	2	00	481a 293 Santa Cruz Island Jay
418a	355	Frosted Poor-will	1	50	2	00	482 295 Arizona Jay 75 1 00
418b	355	California Poor-will	1	50	2	00	483 296 Green Jay 40 75
419	356	Paraque	2	00	3	00	484 297 Canada Jay 40 60
420	357	Nighthawk	3	50	50		484a 297a Rocky Mountain Jay 75 1 00
420a	357a	Western Nighthawk	10	65			484b 297b Alaskan Jay
420c	357b	Florida Nighthawk	90	1	25		484c Labrador Jay 1 00 1 50
421	358	Texan Nighthawk	50	65			4 5 298 Oregon Jay 1 25 2 00
422	350	Black Swift	3	00	4	50	486 280 American Raven 2 00 3 00
423	351	Chimney Swift	2	00	50		486a 280 Northern Raven 2 00 3 00
424	352	Vaux's Swift	1	50	2	00	487 281 White-necked Raven 2 00 3 00
425	349	White-throated Swift	1	50	2	50	488 282 American Crow 50 75
426	334	Rivoli Hummingbird	1	75	3	00	488a 282a Florida Crow 50 1 00
427		Blue-throated Hummingbird	1	75	3	00	489 282b Northwest Crow 1 00 1 25
428	335	Ruby-throated Hummingbird	50	1	00		490 283 Fish Crow 50 1 00
429	336	Black-chinned Hummingbird	75	1	00		491 284 Clarke's Nuthacker 1 00 1 50
429.1		Violet-throated Hummingbird	75	1	00		492 245 Pinon Jay 75 1 00
430	337	Costa's Hummingbird	75	1	25		493(27) Starling 35 00
431	338	Anna's Hummingbird	50	75			494 257 Bobolink 15 30
431.1		Flores's Hummingbird	50	75			494a Western Bobolink 30 50
432	339	Broad-tailed Hummingbird	75	1	25		495 258 Cowbird 15 15
433	340	Rufous Hummingbird	40	75			495a 258a Dwarf Cowbird 60 75
434	341	Allen's Hummingbird	50	75			496 259 Bronzed Cowbird 60 1 00
435	342	Heliose's Hummingbird	50	75			497 260 Yellow-headed Blackbird 25 40
436	343	Calliope Hummingbird	75	1	25		498 261 Red-winged Blackbird 15 25
437	344	Lucifer Hummingbird	1	00	1	50	498a 261 Sonoran Red-wing 75 1 00
438	345	Rufous Hummingbird	1	00	1	50	499 261a Bicolored Blackbird 30 45
439	346	Rufous-bellied Hummingbird	1	00	1	50	500 262 Tricolored Blackbird 30 50
440	347	Antioch's Hummingbird	2	00	3	00	501 263 Meadowlark 30 50
441	348	Broad-billed Hummingbird	1	00	1	50	501a 263a Mexican Meadowlark 50 75
442	342	Fork-tailed Flycatcher	1	00	1	50	501b 264 Western Meadowlark 25 40
443	301	Scissor-tailed Flycatcher	50	75			502(205) Troupial
444	304	Kingbird	15	30			503 266 Audubon's Oriole 1 00 1 50
445	303	Gray Kingbird	75	1	00		501 268 Scott's Oriole 1 00 1 50
446	305	Couch's Kingbird	75	1	50		505 269 Hooded Oriole 50 75
447	306	Arkansas Kingbird	30	45			5 51 Arizona Hooded Oriole 60 1 00
448	307	Cassin's Kingbird	35	50			506 270 Orchard Oriole 20 40
449	308	Derby Flycatcher	1	75	3	00	507 271 Baltimore Oriole 20 50
450	309	Girard's Flycatcher	1	00	1	25	508 272 Bullock's Oriole 25 60
451	310	Sulphur-bellied Flycatcher	15	30			509 273 Rusty Blackbird 20 40
452	312	Crested Flycatcher	15	30			510 274 Brewer's Blackbird 20 40
453	311	Mexican Crested Flycatcher	75	1	00		511 278 Purple Grackle 20 40
453a		Arizona Crested Flycatcher	1	00	1	25	501a 278a Florida Grackle 20 40
454	313	Ash-throated Flycatcher	25	40			511b 278b Bronzed Grackle 50 75
455	314	Lawrence's Flycatcher	1	50	2	00	512 275 Great-tailed Grackle 20 40
455a		Olivaceous Flycatcher	1	00	1	50	513 277 Boat-tailed Grackle 30 50
456	315	Phoebe	15	25			514 165 Evening Grosbeak 60 1 00
457	316	Say's Phoebe	25	35			515 166 Pine Grosbeak 20 75
458	317	Black Phoebe	30	50			516(167) Cassin's Bullfinch 15 25
459	318	Olive-sided Flycatcher	50	70			517 168 Purple Finch 15 25
460	319	Coues's Flycatcher	1	00	2	00	517a 168a California Purple Finch 25 40
461	320	Wood Pewee	15	25			518 169 Cassin's Purple Finch 25 40
462	321	Western Wood Pewee	20	30			519 170 House Finch 25 40
463	322	Yellow-bellied Flycatcher	25	35			519e 170a St. Lucas House Finch 25 40
464	323	Western Flycatcher	25	35			520 171 Guadalupe House Finch
464.1		St. Lucas Flycatcher	2	00	4	00	521 172 American Crossbill 15 35
465	324	Acadian Flycatcher	25	35			521a 172a Mexican Crossbill 50 75
466	325	Little Flycatcher	75	1	25		522 173 White-winged Crossbill 25 60
466a	325a	Trail's Flycatcher	25	35			523 174 Aleutian Lencosticta 1 25 2 00
467	326	Least Flycatcher	15	25			524 175 Gray-crowned Lencosticta 75 1 00
468	327	Hammond's Flycatcher	50	75			524a 175a Hepburn's Lencosticta 75 1 25
469	328	Wright's Flycatcher	30	40			525 176 Black Lencosticta
470	329	Fulvous Flycatcher	75	1	00		526 177 Brown-capped Lencosticta 75 1 00
470a	329a	Buff-breasted Flycatcher	1	75	2	50	527 178 Greenland Redpoll 1 75 2 50
471	330	Vermilion Flycatcher	75	1	25		5 7a 178a Hoary Redpoll 1 75 2 50
472	331	Beardless Flycatcher	2	00	3	00	523 179 Redpoll 15 25
472a		Ridgway's Flycatcher	2	00	3	00	523a 179a Holboell's Redpoll 75 1 00
473	290	Skylark	50	60			528b 179a Greater Redpoll 10 25
474	300	Horned Lark	25	40			529 181 American Goldfinch 25 35
474a	300a	Pallid Horned Lark	30	50			530 182 Arkansas Goldfinch 30 40
474b		Prairie Horned Lark	30	50			530a 182a Arizona Goldfinch 30 40
474c		Desert Horned Lark	25	40			530b 182b Mexican Goldfinch







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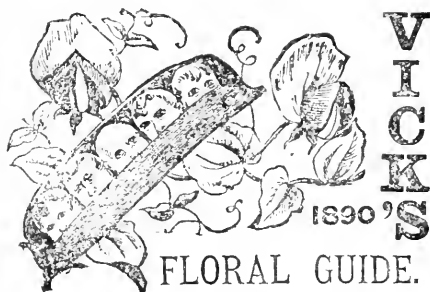
## WE FORGOT TO ANNOUNCE THEM.

In December we issued a new Checking list, which we called "The Oologist's Checking List." It contains the name of every North American Bird, arranged and numbered according to the A. O. U. List. Ridgway's No's are also given and also the value of the egg of every Bird as far as known. They are giving immense satisfaction; are printed on extra heavy paper, eight pages, three foldings, and will go nicely into an ordinary envelope. The first two pages are left blank for correspondence or other purposes.

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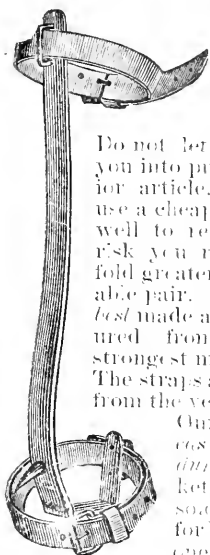
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## AN EXPLANATION.

In the last issue of THE OOLOGIST this cut appeared to "fill up":—

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Shells, Crests, Minerals, Indian Bones, Marbles, etc. - 3. Eggs, Birds, and Specimens of all kinds, Naturalists, and Taxidermists' Supplies. Largest Stock, Lowest Prices. Send for new list, gratis. - FRANK H. LATTIN, ALBION, N. Y.

We have a new large illustrated catalogue in press, it will be ready to mail about March 1st. Our patrons need not write for a copy as we shall send them one as soon as issued, until that time our prices for everything except eggs remain as advertised in the Sept. '88 Bulletin. The prices for Eggs are as listed in Nov. '89 OOLOGIST or as printed on our new "OOLOGIST'S CHECKING LISTS".

Faithfully,

FRANK H. LATTIN.

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In brilliant colors and of rare beauty, from India, Australia, Africa and South America for cash or half cash and half in rare eggs or fine bird skins. Also fine cocoons from other countries. Send for catalogue. State what you want distinctly. *Absolutely* no attention paid to postal cards. Collections made up in cabinets for museums and colleges, containing all the classes of insects from every clime. We have the largest stock of Lepidoptera in New England and charge the lowest prices in the United States.

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and I will make an offer; always enclose stamp.

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Catalogue will be ready in April.



# THE OÖLOGIST.

Monthly. 50c. per Year.

Vol. VII,

ALBION, N. Y., MAY CH, 1890.

No. 3

## Exchanges and Wants.

Brief special announcements. "Wants," "Exchanges" inserted in this department for 25 cents per 25 words. Notices over 25 words charged at the rate of one-half cent per word. No notice inserted for less than 25 cents. Notices which are merely indirect methods of soliciting cash purchasers cannot be admitted to these columns under any circumstances. Terms, cash with order.

**THE EXCHANGE** Notice in Jan. OÖLOGIST is working wonders and I have received already more offers of exchange than I can very well attend to. Very truly yours, WILL A. MOORE, Norwalk, Ohio.

**CURIOS** wanted for my museum. SEERACH Peru. Ills.

**TO EXCHANGE.**—Five pairs Evening Grosbeak Skins and a Chicago Air Rifle (new) for best offer in Bird Skins (Southern birds preferred.) Address all offers to H. L. MERRITT, Box 116, Chatham, Ont.

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For every 50c worth of first class Eggs in sets or single I will send receipt for embalming birds; also Eggs to exchange. A. W. NOLTE, W. 16th St., Los Angeles, Cal.

I will give 75 Foreign stamps, all different, for every 30c worth of first-class Bird Eggs sent me. GEO. A. FREEMAN, Natick, Mass.

**WANTED.**—To exchange Specimens of Wood Minerals, Insects, Marine Curiosities, Bird Eggs and Skins, Stamps and Coins, for Eggs, Insects, Butterflies and Moths. Write, sending list of what you have. First-class specimens given and expected in exchange. No postal cards. Address COLLECTOR, care of Lock Box 628, Paris, Ill.

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**WANTED.**—Collectors having well prepared and carefully identified eggs, specimens or curiosities for sale or exchange at low rates, in large or small quantities, will please send their lists and prices. All eggs must be blown through one hole smoothly drilled in the side, and without stains or ink-marks. FRANK H. LATTIN, Albion, N. Y. (6)

**WANTED.**—Davie's "Egg Check List," (6th binding, third edition. Will give cash. L. C. FREENEY, Potosville Maryland.

**WANTED.**—stamps, Minerals, Birds' Eggs, Indian relics and Birds' Skins. I especially desire U. S. 90c Purple '88 and Match, Medicine and Playing card stamps. I have to exchange Stamp, Minerals, Birds' Eggs and Botanical Specimens. J. D. SORNBORGER, Andover, Essex Co., Mass.

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Black-throated Bluebird	Belted Kingfisher	Canada Goose
Catbird	American Crow	American Swan
Hermat Thrush	Crested Titmouse	Red-headed Duck
Tree Sparrow	Black-headed Goldfinch	Red-breasted Rail
Ruby-crowned Kinglet	Carolina Wren	American Coot
Savannah Sparrow	Abnly Redpoll	Ruby-throated Hummingbird
Red-bellied Woodpecker	Cake Partridge	Bobwhite
Cerulean Sandpiper	Am. Flamingo	Downy Woodpecker
Purple Grackle	Meadow Lark	Robin
Piping Plover	Bobolink	Black-crowned Night Heron
Killdeer	Blue Jay	Wood Duck
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## WE FORGOT TO ANNOUNCE THEM.

In December we issued a new Checking list, which we called "The Oologist's Checking List." It contains the name of every North American Bird, arranged and numbered according to the A. O. U. List. Ridgeway's Nos. are also given and also the value of the egg of every Bird as far as known. They are giving immense satisfaction; are printed on extra heavy paper, eight pages, three foldings, and will go nicely into an ordinary envelope. The first two pages are left blank for correspondence or other purposes.

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Chas. E. Cram, No. 410 Jefferson St., Burlington, Iowa. [J]

H. W. Davis, North Granville, N. Y. [y]

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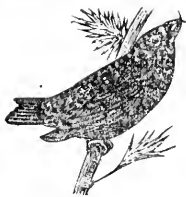
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This work is descriptive of the Nests and Eggs of the Land and Water Birds of North America, which includes all the species known to exist—those that occur or are indigenous north of the Southern United States boundary, including Greenland and the peninsula of Lower California.

The breeding range of each species is given, the time of nesting, the exact number of eggs laid, their color and size together with the chief characteristics of the birds.

The arrangement of the work is according to the new nomenclature of the A. O. U. Code and Check List, and the old numbers (Ridgeway's), as used in former editions, are placed to the right of each species. Throughout the text all the common names of the birds are to be found and a COMPLETE ANALYTICAL INDEX of these is given.

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## AN EXPLANATION.

In the Jan. issue of THE OOLOGIST this cut appeared to "fill up":

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We have a new large illustrated catalogue in press, it will be ready to mail about March 15th. Our patrons need not write for a copy as we shall send them one as soon as issued, until that time our prices for everything except eggs remain as advertised in the Sept. '88 Bulletin. The prices for Eggs are as listed in Nov. '89 OOLOGIST or as printed on our new "OOLOGIST'S CHECKING LISTS".

Faithfully,

**FRANK H. LATTIN.**



# THE OOLOGIST.

VOL. VII.

ALBION, N. Y., MARCH, 1890.

NO. 3

## Summer Residents of Buena Vista Co., Iowa.

This list does not pretend to be complete, as I have had no opportunity to visit the southern and western portions of the county during the breeding season.

1. (*Podilymbus podiceps*) Pied-billed Grebe. Breeds abundantly in the ponds and sloughs.

2. (*Hydrochelidon nigra surinamensis*) Black Tern. Nests commonly on the floating vegetation and bogs of the sloughs.

3. (*Anas boschas*) Mallard. Common but getting scarcer. Nests in fields, meadows and marshes.

4. (*Anas obscura*) Black Duck. Two nests were found during 1888. One was built well above the water in the edge of a slough and contained thirteen eggs. The other was built on a marsh.

5. (*Anas carolinensis*) Green-winged Teal. One nest was found in 1887, built in the prairie grass and contained eleven eggs. Bird was shot, but not very well identified.

6. (*Anas discors*) Blue-winged Teal. Common. Lays from eight to eleven eggs in a nest in the prairie grass.

7. (*Spatula clypeata*) Shoveler. Common during migrations. One nest was found in 1888.

8. (*Dufila acuta*) Pintail. Very abundant during the spring migration. Some remain to breed.

9. (*Branta canadensis*) Canada Goose. Was formerly very common, and bred. Now is only with us during spring and fall migration. Perhaps a few still breed in the county joining this on the north (Clay).

10. (*Botaurus lentiginosus*) Am. Bittern. Common. Makes its nest in the edges of ponds, in the high grass. Lays from three to five drab eggs.

11. (*Botaurus exilis*) Least Bittern. Not as common as the preceding species. Makes its nest over water. Lays three to five pale blue eggs.

12. (*Grus Americana*) Sandhill Crane. Formerly bred, but now is only seen during migrations.

13. (*Rallus clegans*) King Rail. Not very common. Nests are well concealed and hard to find.

14. (*Rallus virginianus*) Virginia Rail. Scarce. One nest found in 1889, but eggs were destroyed.

15. (*Porzana carolina*) Sora. The most common of the Rails which breed here. Lays from eight to fifteen eggs. Makes a nest of grass in the edges of sloughs.

16. (*Fulica americana*) American Coot. Abundant. Nest is a pile of rushes in the edge of ponds. Eggs are from ten to fifteen in number.

17. (*Bartramia longicauda*) Bartramian Sandpiper. Formerly abundant, but the last few years they have been killed in great numbers for eastern markets. Still common. Makes its nest in the prairie grass. Lays four spotted eggs.

18. (*Numenius longirostris*) Long-billed Curlew. Have record of one nest found several years ago. Very rare now.

19. (*Egialitis vocifera*) Killdeer. Common. Makes its nest in fields and on top of hills. I have never found one near water.

20. (*Colinus virginiana*) Bobwhite. Not abundant as yet, but seems to be getting more numerous. Two nests were found last year.

21. (*Tympanuchus americanus*) Prairie Hen. Common. Nests in the prairie grass. Laying from ten to fifteen eggs.

22. (*Zenaidura macroura*) Mourning

Dove. Nests abundantly in the groves.

23. (*Circus hudsonius*) Marsh Hawk. Somewhat common. Found three nests last year: May 1st, one containing two eggs; June 5th, one containing five eggs; and one July 1st, containing young birds. I have information of at least two other kinds of Hawks that breed in the woods west of here, but do not know which kind as yet.

24. (*Asio accipitrinus*) Short-eared Owl. One nest was found last year. It contained five eggs. They had been run over by a prairie fire. Two were quite badly burned and one was cracked, but the other two are fine specimens.

25. (*Coccyzus americanus*) Yellow-billed Cuckoo. Quite common.

26. (*Coccyzus erythrophthalmus*) Black-billed Cuckoo. Not so common as the preceding species.

27. (*Colaptes auratus*) Flicker. One nest found last year.

28. (*Chordeiles virginianus*) Night Hawk. Common, but the nests are not often found, as the bird will not fly unless nearly stepped upon and the eggs look so much like the ground that they can hardly be found.

29. (*Tyrannus tyrannus*) Kingbird. Very common. Nests in the groves and along the shores of lakes.

30. (*Empidonax minimus*) Least Flycatcher. Found several nests last year and some before. The nest cannot be distinguished from that of the Yellow Warbler. The eggs are four pure creamy white, very handsome.

31. (*Otocoris alpestris praticola*) Prairie Horned Lark. Abundant. Makes its nest in the fields and on the prairie.

32. (*Cyanocitta cristata*) Blue Jay. Not very common.

33. (*Corvus americanus*) American Crow. Heard of a young one being captured in the woods west of here.

64. (*Dolichonyx oryzivorus*) Bobolink. Abundant, but nests are very hard to find, because so well concealed in the grass.

35. (*Molothrus ater*) Cowbird. Quite common.

36. (*Xanthocephalus xanthocephalus*) Yellow-headed Blackbird. Very abundant. Breeds in the canes and rushes of the ponds and sloughs.

37. (*Agelaius phoeniceus*) Red-winged Blackbird. Exceedingly abundant. Breeds by the hundreds in the grass around ponds.

38. (*Sturnella magna*) Meadow Lark. Common. Nests in prairie grass and under piles of hay.

39. (*Icterus spurius*) Orchard Oriole. Not very common. A favorite nesting place is around the shores of a small lake. Hangs its nests in the scrub trees.

40. (*Quiscalus quiscula cencus*) Bronzed Grackle. Abundant. Nests high up in maples, etc.

41. (*Spinus tristis*) American Goldfinch. Have found two nests containing eggs and several nests supposed to be Goldfinches after the leaves were off the trees.

42. (*Spiza americana*) Dickcissel. Abundant. Nests anywhere, on the ground or quite high in the trees.

43. (*Progne subis*) Purple Martin. Quite common. Will occupy all houses put up for their accommodation.

44. (*Chelidon erythrogaster*) Barn Swallow. Common.

45. (*Vireo gilvus*) Warbling Vireo. Not uncommon. Several nests were found this year.

46. (*Dendroica aestiva*) Yellow Warbler. Abundant.

47. (*Catantopus carolinensis*) Catbird. Not very common.

48. (*Harporhynchus rufus*) Brown Thrasher. Quite common.

49. (*Troglodytes aedon*) House Wren. Three nests have been found, one in the pocket of a coat that was hanging in a tree, one in a shed and one in a bird-box.

50. (*Cistothorus stellaris*) Short-billed Marsh Wren. Rather Abundant. Found

several nests during 1889. Nests were made of grass, in the shape of a cocoon. Eggs six in number, pure white.

51. (*Cistothorus palustris*) Long-billed Marsh Wren. Abundant. Breeds in the dry grass in sloughs.

52. (*Merula migratoria*) American Robin. Very common.

Would like to see lists from other counties of Iowa.

JOHN V. CRONE,  
Buena Vista Co., Iowa.

#### A Day in the Woods of Florida.

On the banks of the Indian River there is a field of study and delight for the Naturalist, although perhaps tinged with some little danger, in searching for the variety of natural products of this semi-tropical country during the spring months. The deep, gloomy forests of cypresses and pines, interspersed with tracts of live oaks, maples, varieties of palms and flowering vines in full blossom, the open tracts of country and vast swamps, penetrated by the lagoons and creeks of the Indian River, furnish an abundant variety of specimens for the Ornithologist, Entomologist and Botanist. Venomous serpents present the only danger. The Water Moccasin (*Torichphis piscivorus*) is the most abundant, inhabiting the low, swampy district, the Land Moccasin (*Ancistrodon contortrix*) or Copperhead being less numerous, found on the dry lands and fields, and that terrible reptile, the Diamond Rattlesnake (*Crotalus adamantens*) which attains the length of over nine feet with a diameter of five inches and more, is liable to be encountered in any locality except the most swampy tracts where the Water Moccasin is found. These serpents and the Harlequin snake found on the higher lands are the only ones to be viewed with dread. The Rattlesnake is the least common of the *Crotalida*. The Moccasin is quite

abundant and equally to be dreaded. With the exception of these reptiles together with centipedes, some large spiders and an occasional scorpion, there are no other drawbacks to the field naturalist and collector. The timid may exclaim that these were surely enough drawbacks and should serve to dampen the ardor of the Naturalist, but there are always dangers and obstacles to the student of Nature which increase to a great extent in more tropical countries, where one has to be on almost constant guard against the larger beasts of prey, enormous serpents, the Boas and Pythons as well as the smaller venomous snakes, and innumerable swarms of spiders, scorpions and centipedes and other pests which deter all but the most enthusiastic naturalist from thorough investigation. Florida is comparatively exempt from dangerous animals. An occasional Panther or Bear may rarely be encountered in the dense forests, but which are of a more cowardly disposition than otherwise, seldom attacking man unless wounded and at bay. All danger is forgotten by the naturalist eager in pursuit of some rare object. I remember encountering a large moccasin while threading my way through a villainous swamp in search of the beautiful Hooded Warbler (*Sylvia mitratus*) which frequents low, swampy woods. The serpent was coiled and ready to strike when I noticed it. I hastily retreated a few paces and shot it. I decided to retrace my steps and not penetrate farther into the morass when my mind was diverted by a few tinkling notes. Looking in the direction from which they proceeded I saw the object of my search flitting among the bushes, and forgetting my decision to turn back, and intent on securing the warbler, I started in pursuit. The bird led me a long chase, and eventually disappeared for good and I was left a quarter of a mile farther in the swamp, vexed and

disappointed. It was April. The sun had reached a point nearly overhead and the heat was intense, certainly over one hundred degrees and the air was suffocating with the effluvia of the coarse rank vegetation. Before me was a dense thicket of green briar or chapparral utterly impassable. I retraced my steps, fortunately without losing my bearings. To lose one's self in these vast swamps and forests would be a very serious matter. Cutting a light pole I parted the dense mass of vegetation ahead of me and before I had advanced a dozen rods I discovered another ugly moccasin coiled and ready to strike. I speedily despatched the reptile and just before reaching higher and dryer ground espied another, who, contrary to their usual habit beat a hasty retreat before I could shoot it. These swamps during the spring, summer and early autumn must be a very hotbed of these hideous venomous reptiles, which are more dreaded than even the rattlesnake, for they give no warning when approached, and seldom retreat. They attain the length of five and six feet and their largest diameter is often over four inches. Still notwithstanding the hidden dangers under foot, the eye is entranced and bewildered at times with the profusion of flowers one meets. Large areas of the fragrant yellow jessamine and other beautiful flowering vines and flowers of different kinds are met with in all directions, the beautiful four-leaved Cherokee rose, a pure white flower nearly four inches in diameter being very conspicuous. But it is here where the deadly moccasin lurks, and here as well as elsewhere the venomous crawling centipedes make their home in the rotten timber. Upon emerging from this vast tract of danger and beauty, most suffocating heat, fragrant flowers and noxious vegetable gases, I enter upon a space of open country interspersed with shrubbery and trees. Here

the birds, the most beautiful forms of all animal life, are more abundant. I walk along the edge of the swamp. Among the tree tops and bushes many species of migrating birds are seen, which in the course of a few weeks with the exception of those indigenous to the Southern States, will wend their way to the far north to breed. Nearly all of the migratory land birds and many of the shore and water birds winter here; many species, however, passing still further south to the West Indies, the Bahama Islands and probably a few extend their migrations into South America. In the course of my rather limited observations from January to the first week in April, I have met with nearly every land bird that is found in New England, with the exception, of course, of the few winter birds that visit those states and return to the far north at the approach of warm weather. The Mockingbird (*Mimus polyglottus*) is one of the most conspicuous among the birds here, is now in full song, and is met with every few rods. They are almost domesticated, unsuspecting and familiar to a degree that is surprising and pleasing. They repose the utmost confidence in man, and well they may, for they are never molested and make their rendezvous and homes near the houses being seldom met with in the unsettled districts.

CLARENCE W. ROWLEY,  
Ellis, Mass.

#### Birds of Mackinac Island, Mich.

As observed by Mr. T. Gilbert White during the summer of 1889. The figures at the left of the rarer species indicate the number of specimens seen. B, breeds; M, migrant.

Am. Robin,	Common.	B.
Wilson's Thrush,	Uncommon.	B.
Hermite	"	Common. B.
Olive-backed	"	" B.
Bluebird	"	" B.
Golden-crowned Kinglet,	"	"
♀ Ruby	"	Rare. B.

- 2 Blue-gray Gnatcatcher, " M.  
 1 White-bellied Nuthatch, " M.  
 Red " " Common.  
 Chickadee, Abundant. B.  
 2 Brown Creeper, Rare. M.  
 Brown Thrush, Uncommon. B.  
 House Wren, Common. B.  
 Winter Wren, Common.  
 Horned Lark, Abundant. M.  
 2 Purple Martin, Rare.  
 7 Cliff Swallow, Uncommon.  
 Tree Swallow, Abundant. B.  
 Barn Swallow, Abundant. B.  
 3 Bank Swallow, Rare.  
 Cedar Waxwing, Abundant. B.  
 1 Scarlet Tanager, Rare.  
 Black and White Creeper, Common. B.  
 Nashville Warbler, Common. M.  
 Tennessee Warbler, Common. M.  
 Parula Warbler, Uncommon. M.  
 Yellow Warbler, Common. B.  
 Black-throated Blue Warbler, Com. M.  
 Yellow Rumped Warbler, Common. B.  
 Black and Yellow Warbler, Com. B.  
 Bay-breasted Warbler, Uncommon. M.  
 Black-poll Warbler, Rare. M.  
 Blackburnian Warbler, Common. M.  
 Black-thr. Green Warbler, Abund. B.  
 4 Pine-creeping Warbler, Rare. M.  
 Yellow Red-poll Warbler, Common. M.  
 2 Prairie Warbler, Rare. M.  
 Oven Bird, Common. B.  
 Canadian Warbler, Common.  
 Am. Redstart, Common. B.  
 2 Blue-winged Yellow Warbler Rare. M.  
 3 Wilson's Warbler, Rare. M.  
 1 Connecticut Warbler, Rare. M.  
 Red-eyed Vireo, Common. B.  
 1 Warbling Vireo, Rare.  
 Purple Finch, Common. B.  
 Am. Cross-bill, Uncommon. M.  
 American Goldfinch, Common. B.  
 Vesper Sparrow, Common. B.  
 2 White-crowned Sparrow, Rare. M.  
 White-throated Sparrow, Common. B.  
 Chipping Sparrow, Abundant. B.  
 8 Field Sparrow, Uncommon.  
 State-colored Junco, Common. B.  
 Song Sparrow, Uncommon. B.  
 Indigo Bunting, Uncommon. B.  
 3 Meadow Lark, Rare.  
 Rusty Grackle, Common. M.  
 3 Purple Grackle, Rare. M.  
 Blue Jay, Common. B.  
 8 Canada Jay, Uncommon. M.  
 American Crow, Abundant. B.  
 Kingbird, Uncommon. B.  
 Phoebe, Uncommon. B.  
 Wood Pewee, Common. B.  
 1 Acadian Flycatcher, Rare. M.  
 4 Least Flycatcher, Rare.  
 Downy Woodpecker, Common. B.  
 Pileated Woodpecker' Rare.
- 2 Red-headed Woodpecker, Rare.  
 Flicker, Common. M. (B.)  
 Whip-poor-will, heard some.  
 Night Hawk, Common. B.  
 Chimney Swift, Uncommon.  
 3 Ruby-throated Hummingbird, Rare.  
 1 Yellow-billed Cuckoo, Rare.  
 1 Black-billed Cuckoo, Rare.  
 3 Kingfisher, Rare.  
 Sora; Carolina Rail, Common. B.  
 2 Marsh Harrier, Rare.  
 Sharp-shinned Hawk, Common.  
 5 Cooper's Hawk, Uncommon.  
 3 American Goshawk, Rare.  
 7 Broad-winged Hawk, Rare.  
 3 Bald Eagle, Uncommon.  
 Sparrow Hawk, Common. B.  
 American Osprey, Common.  
 1 Barred Owl, Rare.  
 Passenger Pigeon, Common. M.  
 Wood Duck, Rare. M.  
 Wilson's Snipe, Common. M.  
 2 American Woodcock, Rare. M.  
 1 Semi-palmated Sandpiper, Rare.  
 Spotted Sandpiper, Common. B.  
 American Herring Gull, Common. M.  
 Ring-billed Gull, Uncommon. M.  
 3 Kittiwake Gull, Rare. M.  
 Caspian Tern, Common. M.  
 Royal Tern, Common. M.  
 Great Blue Heron, Rare. M.  
 Total, 101 species of which 41 breed  
 and 32 were observed only as migrants.

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Among the Gulls on Isle Royale.

— — — — —

Isle Royale, of Lake Superior, is a long narrow island surrounded by small barren rocks rising seven or eight feet out of the water. These rocks prove an excellent home for the American Herring Gull and immense numbers come here every summer, to rear their young. As the island is only inhabited by fishermen, the birds are rarely molested; the men gathering only a few eggs for their own use. Although the birds are found all around the island, in more or less numbers, they have two or three places where they form large colonies, such for instance is Gull Island, at the north-eastern extremity of the main island and the Gull Rocks along the northern coast.

It was my good fortune to make a trip to this island last season and carry

away some very handsome sets of their eggs. Having got my outfit together, I started on the morning of June 3rd, on board a small steamer, of the Booth Packing Co., that runs between here and the island, gathering up the fish that are caught. I arrived at the collecting grounds early on the morning of the 4th and immediately set about business. Having made a bargain with one of the fishermen, to take me around in his boat, we set out about 5 a. m. for the Rock of Ages, a colony at the western extremity of the main island. While we were yet 300 or 400 feet from the rock, the Gulls commenced to rise in dense clouds and to utter piercing cries, which in fact they kept up all day and which have a most tiresome effect on a person. Having landed, we set to work to fill our baskets, I here found that it was somewhat late in the season; as a few young birds were seen and quite a number of eggs afterwards proved to be partly incubated. We soon had our baskets full and our hats also and so thought it was time to return. Having put the eggs aboard we steered for camp, but while passing a small rock somewhat wooded we saw a pair of Red-breasted Mergansers fly off. We immediately landed and after a little searching found their nest, placed on the ground and nearly covered with down and dry grass, so that we almost stepped on it before we saw it. It contained 11 fresh eggs; these having been packed away we again got aboard and arrived at camp, pretty well tired out but very well pleased with the day's work. The next day I spent in blowing my eggs and packing them for carrying to town. About 4 a. m. next morning, the steamer came along and I decided to go further along the island. I got to the eastern extremity about evening and went to bed early expecting a good days work on the morrow. I was up bright and early next morning and

things having been prepared the previous evening we set out at once for a rock about seven miles away.

Arrived there we went through the same performance as before and came back loaded with eggs. In nearly every case there was no attempt at any nest building, the eggs being deposited in some hollow on the bare rock, although after the bird has set a while on them refuse collects around and forms somewhat of an excuse for a nest.

The usual complement is three, but occasionally only two. In a large number of eggs there is great variation in size, shape and color, ranging from 2.50 x 1.60 to 3.00 x 2.00 in size and from deep brown to nearly white, blotched all over with brown and lilac of various shades. The next day was spent in preparing the eggs and then I moved further around the island and repeated the operation, arriving home on the 11th, after one of the most pleasant collecting experiences of my life. I believe Loons also breed around this island but in comparatively small numbers. I saw no nests on my trip but saw a good many birds and the fishermen tell me they have found their eggs.

CHAS. A. DAVIS,

Duluth, Minn.

#### An Albino Grackle.

Mr. E. L. Kendall, of Orange Co., Texas, reports a "White Blackbird." The bird is white all over and is of the Bronze Grackle species. It is very shy and all attempts to shoot it have failed.

The bird has also been seen by Mr. C. R. Walter, who says that the bird is in a flock of a hundred or more and that to get near enough to shoot it is an impossibility.

Are White Blackbirds common?

This is the first one I have ever heard of.

W. E. G., an oologist of Galveston, reports a half completed Red bird's nest, Feb. 9, '90.

Will someone through the columns of the OOLOGIST, inform me how to make a good collecting box or case to take on an eggging trip.

A. DROUET, JR.,  
Galveston, Texas.

#### Early Nesting of the Great Horned Owl.

Feb. 17, of this year (1890) a nest of this species was found here which contained three young at least a week old.

The eggs in this case must have been laid by the middle of January.

On the 5th of this month (Feb.) a nest was found which contained one egg which was broken, probably by a squirrel.

On the 15th, two more nests were found, one containing two badly incubated eggs and the other a set of four fresh eggs, a large set, for this locality at least.

J. H. BROWN,  
Powersick Co., Ia.

On February 10th, I got out my outfit to take a trip to French Island where I knew a pair of Great Horned Owls had a nest. When I got to the roost, I found that Mr. and Mrs. Owl were not at home, so I commenced to hunt them up. After rapping and throwing clubs at a number of hollow trees and old stumps in the vicinity, I started for an old elm tree where I found a nest and took a set of eggs last year. After rapping on the tree, I looked up and was surprised to see a pair of ears sticking up above the edge of the hole. I threw a stick up and out came Mrs. Owl and lit on a tree near by. The nest was only twenty feet up and I was twenty feet up too in a very few minutes to find four nice white eggs. Incubation had just commenced. I have taken sets of eggs in March when the snow was two feet deep on the ground. Isn't the tenth of Febru-

ary early to commence collecting?

WHIT HARRISON,  
Houston Co., Minnesota.

On Friday, January 31, 1890, I thought I would take a trip to the timber to see what prospect there was for Owls' nests this season. I succeeded in locating several and was very well satisfied with my day's work, when I looked over across the woods a little ways, I saw a large bunch of sticks in a large hickory tree. I at once went over to examine the tree to see if I could climb it in case the Hawks ever occupied it. When I got at the foot of the tree and looked it thoroughly over, I spied a half dozen or more yellowish downy feathers clinging to the side of the nest, so I at once procured a club and tossed it towards the nest. When, to my surprise, a *Bubo Virginianus* flew off and alighted on a tree near by. I thought her movements peculiar, so I adorned my climbers and ascended. When I reached the nest after a hard climb, I was rewarded by finding one egg with a young owl ready to greet me, for he had a hole picked large enough to admit my finger. I let him remain in the nest, thinking to call when he was older and secure him as my reward instead of nothing or a worthless shell. This I consider very early for the Owl to lay; usually in this latitude about Feb. 15th. Let me hear who has had like experience.

C. B. VANDYCOOK,  
Marion Co., Ills.

#### Large Numbers of Sandhill Cranes.

I am of the opinion that the readers of the OOLOGIST, have never seen so many and so large Sandhill Cranes as we had the pleasure of seeing and shooting on the 9th of Feb., 1889. They were crossing White River Valley in a Northerly direction, in a continuous stream all the afternoon, and toward s

night they settled down in a swampy pasture, as if tired of flight. Many boys had been watching them before they came down and accordingly made a detour around them with shotgun and rifle. In spite of their caution, only three or four fat fellows were bagged, the rest rising in a huge dark mass of necks and wings out of range. The excitement, however, kept many banging away with rifles, some parties taking them for geese and thinking to have a treat. I secured one for mounting, but he was very badly torn with someone's charge of buckshot. They were probably following the warm rains, northward finding the climate on this side of the range more agreeable. To-day, Feb. 4th, at dark, saw a small band of Cranes flying low, answering their leader's deep cry with weary voices, as it was stormy weather. They, like the Loon, haunt the marshy lakes in this locality. This summer I found two Ruby-throated Hummingbirds dead in the window of an old house, having killed themselves against the window. They were male and female. I put them in my cabinet as they were perfectly preserved.

URIAH L. HERTZ,  
Kent, Wash.

#### The Abnormal Coloration of the Eggs of a Pair of *Passer Domesticus* Kept in Confinement.

Upon reading Mr. George N. Lawrence's article on the change in the coloration of certain parrots, which he considers is caused by the birds being kept in confinement (see *Auk* vol. 6, No. 1) brings to my mind the change in coloration of the eggs of a pair of English Sparrows kept in confinement.

One winter a pair of Sparrows entered the kitchen of a friend of ours through an open door, whereupon the door was shut and the birds were caught and put into a cage, where they thrived very well. The female laid three or four clutches of eggs every season, which

were not as other eggs of this species, dull whitish, thickly speckled and dashed with dark brown and purplish gray, but of a pure, clear white color, evenly and thinly spotted with a light purplish gray.

I think that the change in the coloration of the eggs in this case is due to the same cause that caused the plumage of the parrots to change and that is, being kept in confinement.

JOHN LUHRMAN,  
Jersey City, N. J.

#### The Evening Grosbeak.

This beautiful bird is not a very plentiful one here, but they may be seen in flocks in winter and early spring and sometimes fall, but generally about the time cherry trees begin to blossom, as they are fond of the blossoms. They also eat maple buds a great deal.

On Jan. 26th, I run across a flock of about twenty Grosbeaks, mostly males and I picked out one and tapped him over with a load of shot from my catapult and afterwards made a skin of him which now adorns my cabinet. I find the pocket catapult comes in handy when you suddenly run across a bird you want.

The specimen before me measures 7 3-10 inches long and the wing is 4 3-10 inches. The forward half of the body is yellowish-olive shading into yellow on the rump and under tail coverts; the crown, wings, upper tail coverts, and tail, black; frontal band, bright yellow. The beak is very thick and powerful. I found this out while attempting to catch a wounded bird when he caught me instead.

The nest is very rare as only a few are on record, but no doubt they nest in some of the pine forests in or near the mountains.

CLYDE L. KELLER,  
Marion Co., Oregon.



# THE OOLOGIST

EDITED AND PUBLISHED MONTHLY

—BY—

FRANK H. LATTIN, - ALBION, N. Y.

Correspondence and items of interest to the student of Birds, their Nests and Eggs, solicited from all.

**TERMS OF SUBSCRIPTION.**

Single Subscription, - - - 50c per annum.  
 Sample Copies, - - - 5c each.  
 The above rates include postage and printing.

**ADVERTISING RATES.**

Single Insertion, 20 cents per line, nonpareil.

	1 mo.	3 mo.	6 mo.	1 yr.
Five lines,	1 00	2 50	4 00	6 00
One inch,	2 00	5 00	8 00	12 00
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**FRANK H. LATTIN,**  
 ALBION, Orleans Co., N. Y.

Entered at the Post Office at Albion, .. as second class mail matter.

**Jottings.**

Reports from all quarters indicate an early season.

All matter intended for April OOLOGIST, should be in not later than March 20th.

A very agreeable surprise is in store for the patrons of the OOLOGIST—full particulars next month.

A Query Column will be inaugurated in April issue, through which any query of interest will be answered.

Among early arrivals, we were pleased to record on Feb. 22nd, a very pleasant visit from our Niagara Co. Orni-

thologist, Mr. J. L. Davison of the First National Bank, Lockport.

If you observe anything unusual or interesting, write it up for the OOLOGIST or drop us a line on a postal giving the *facts*. We expect to publish a page or more of these interesting items in each future OOLOGIST.

Unquestionably one of the most valued testimonials ever accorded the OOLOGIST, was the five page bibliographical list, that appeared in the January *Auk* of "items of considerable interest and value which ought not be overlooked." The Doctors find that *one hundred and seventeen* of these item have appeared in the OOLOGIST during the past few years.

**Early Nesting.**

Found a set of two eggs of Costa's Hummingbird, Feb. 13, and a nest of Least Tit nearly finished.

A. W. NOLTE,  
 Los Angeles, Cal.

**A Correction.**

I wish you would set J. C. G. right in regard to his "Unusual Nesting of Downy Woodpecker" in last OOLOGIST, for without a shadow of a doubt they are the Albino form of Bluebirds' eggs.

C. W.,  
 Brooklyn, O.

**Only 13 Left.**

We have just 13 complete sets of YOUNG OOLOGIST and OOLOGIST left. A complete set consisting of every number published since May 1st, 1881, will be sent you by return mail for only \$2.50. This offer is good for 30 DAYS ONLY.

### The Cowbird.

Everybody is too well acquainted with this meanest of bird kind to need any description of it or, its eggs and so it will not be necessary to describe it. What collector has not seen its eggs in other birds' nests? In fact it is hard to find a nest without from one to four eggs of this bird in it. I have seen nests of the Chewink with four Cowbird's and one of their own eggs in, I also have a nest of the Indigo Bunting in my collection that has a bottom built over a Cowbird's and one of its own eggs, the Indigo laid two more eggs, which were thrown out (probably by the Cowbird) and two of the Cowbird's eggs laid in the nest. I always throw out all the Cowbird eggs that I find in nests, while collecting and advise everybody else to do the same. The question is who ever saw a Cowbird sitting on a nest? If anybody ever did I would like to hear from them through the OOLOGIST.

R. C. ALEXANDER,  
Wayne Co, Mich.

### Ruby-crowned Kinglet.

This delicate bit of bird life seeming to know that he is a little more choice than the Golden-crowned, is more chary of his company than the soberer and smaller relative. When, however, he deigns to grace the twigs of your orchard with his presence it is a visit worth remembering, especially if perching on the topmost spray, he gives utterance to his pleasing warble. This sounds so loud and sweet that one almost involuntarily looks around for some larger author than the diminutive musician there above. He is very tame and unsuspecting. He thinks no doubt

that no one would hurt such a fine fellow, and will admit of the closest scrutiny without alarm. He is a very busy little bird rarely quiet for an instant and always searching for food; his movements are spry and he is not averse to anything in the insect line that comes his way, beetles, ants, slugs, borers, all disappear and ever and anon he flashes from the limb to seize some luckless fly.

On the 20th of last July, my brother and I were slowly sauntering along a road on the island of Mackinac, headed for "my collecting place." (What collector has not a spot that he calls so, in his own mind at least?) when my attention was attracted by a great commotion in an evergreen tree near at hand. You may be sure that I lost no time in investigating its cause and, on running to the the spot, I beheld two adult Kinglets busily engaged in coaxing two fully fledged young ones from a nest; three other youngsters were sitting on a limb by the nest, mortally afraid, no doubt, of a fall. I secured two of the young and climbed the tree to look at the nest; this was constructed on top of the "fan" at the end of the branch. It was a very bulky structure, a great deal longer than broad, composed of pine needles and moss, lined with grass and down. It was so loosely constructed that a few blows of the hatchet on the limb were sufficient to send the nest to irredeemable smash. The identity of the parents was nearly perfect. I did not wish to shoot them, so contented myself with the very good view offered when climbing the tree.

STEWART E. WHITE,  
Kent Co., Mich.

### The Cactus Wren.

The Cactus Wren breeds abundantly in Southern California. They usually nest in colonies. The site selected being a rocky mesa over-grown with cacti and chaparral. The name Cactus

Wren is derived from the peculiar habit of their nesting in the cacti. The nest is a bulky affair made of dried grass and weeds and lined with feathers.

Many of the nests I examined contained a lining of two or more inches in thickness, I suppose this to be partly to protect the eggs from the cactus thorns and as the outside of the nest is not very compact, to protect the eggs from the cold. The typical nest will measure 8 x 14 inches. It is purse shaped, with an entrance near the top. Some extraordinary specimens I have seen had a neck like a bottle attached to the nest, but this is seldom. They most always build in the cacti, but some times I have found their nests in the chaparral. The Cactus Wren begins to build about the first of March, patching up the old nest or building a new one on top of the old. Like most other birds that breed in colonies, they all begin to lay about the same date. That is, if you find one nest in a colony containing three or four eggs, you can calculate on finding all of the others containing the same complement.

When fresh, the eggs are of a deep salmon color, but on being blown fade to dull carmine. The average complement is five. I believe they rear three broods during a season, as I have found fresh eggs as late as June.

WALTER RICHARDSON,

Los Angeles Co., Cal.

#### Habits of a Screech Owl in Captivity.

I had the good fortune of having the opportunity afforded me last fall, to study the habits of a Screech Owl in captivity, and I thought that it might interest some of the readers of the OOLOGIST.

He was about eight or ten inches in length, and his wings measured eighteen inches from tip to tip. His plumage was the usual grey.

He had a marvellous appetite, de-

vouring anything, whether cooked or raw. He was very fond of mice, catching them by the neck he would commence swallowing them, but it was or seemed to be very difficult for he strained and forced until his mouseship disappeared. When all had been swallowed but the tail, the owl quit swallowing and the weight of the mouse would pull it in slowly.

It required from four to five hours to digest a mouse, at the end of that time he disgorged the fur which looked like chewed felt; it was oblong, about an inch and a half in length by half an inch in diameter. When I examined the ball, I found no trace of the bones, which as I have read are thrown up with the fur. This surprised me. Therefore, I came to the conclusion that the mice must have been very young and the bones had not hardened, or that his gastronomical construction must have been very powerful.

His temper was fearful. He fought and snapped his bill at a great rate when anyone came near the cage. If a stick was put through the bars of the cage he would fly at it with force enough to knock it out of your hand. The climax was reached one day when a dog came near his cage; he flew from one side to the other snapping and clawing furiously. He would keep this up until the dog would get out of sight, then he would settle down and become as sober as a judge.

He was very sensitive to light and on being brought near a whitewashed fence on which the sun was shining the pupil of the eye next to the fence would contract till it appeared to be a mere speck while the other was some what larger. If taken into a darkened room you could see the pupils dilate until it seemed as if his eye was all pupil.

This was his most interesting trait.

R. W. PATTERSON,

Wood Co., W. Va.

### Taking of Birds' Nests.

In a late number of the OOLOGIST is an article based upon the scientific studying of Birds' Nests and the collecting of the same. From what is said in this article it seems as if its writer has chosen the winter months in which to collect nests. It is here I wish to differ in the time, that nests should be taken, it is true. The nests of different birds afford a great deal of study; something may be learned from each tiny little nest as has been said by Alexander Wilson: "Some nest by the roadside, some in the thorn, others on the mountain side, some by the sea, etc., etc." It will generally be seen each variety seeks a different place to construct its nest after its own pattern. And to look upon a fine collection of nests taken in proper season, all neatly labeled, is a sight worthy to behold.

From the green bail of moss neatly lined placed among growing moss by the side of some waterfall snugly hid away, shows the instinct of the Water Ouzel. Far up 300 feet or more aloft on the face of some cliff, shows the wonderful powers to select a nesting site of the Golden Eagle.

How neatly saddled on some dead limb is the nest of the Wood Pewee.

Nests should be taken in the summer when the eggs are removed.

The nest is then neat and new, as an example: The nest of the Orchard Oriole when first made is a neat construction of green grass woven into a hanging position. After the nest has been exposed to a shower of rain it at once becomes dull and faded, assuming a sunburnt yellow color. Leave it now until the young have been hatched and flown and the gales of autumn and winter have tried their strength upon it and the bugs and other insects have taken refuge in it to get away from the cold of winter, then go out and collect the nest; put it in your cabinet, com-

pare it with one you have taken in the summer and see if not greatly preferred than the one that hung in the tree five months after the young were reared in it. The Cliff Swallow may be another that each collector would only want "one nest" taken after the young had flown.

GEO. F. BRENINGER,  
Fort Collins, Colorado.

### The Blackbird Problem.

I saw the statement and query made by Mr. Posson of Medina, N. Y., in the OOLOGIST, also the answer given by Mr. Hauaford of Grand Rapids, Mich.

I have had excellent opportunities and have spent considerable time in observing the habits of these birds during the fall migrations, I find as a result that they collect in immense flocks in certain localities where there is plenty of food and a good roosting place.

There is a large crow roost about ten miles north-east of here where about 6000 crows roost every fall.

Every night during October thousands of blackbirds rise from our fields and fly north-east with the long strings of crows to the roost. Probably the reason why this explanation did not occur to Mr. Posson, is the fact that they are not often seen returning with the crows in the morning, as I think there need be no doubt, but that there is another similar roost north-east of Medina or that they fly to the roost of which I speak, which seems improbable from the great distance. Either the flocks fly south from the roost to their feeding grounds before the crows go and thereby escape observation, or else they fly a different route mornings from that taken at night, and I do not see them. I think the first is most likely as they commence coming from the south before noon on fair days, and they might easily fly over early in the morning before it is very light without being seen as they fly very high when taking long flights.

ERNEST SHORT,  
Monroe Co., N. Y.

# BIRDS' EGGS.

Eggs are numbered to correspond with Ridgeway's Nomenclature.

All eggs are carefully prepared, being blown from one smoothly drilled hole in the side and are warranted true to name.

All specimens will be carefully packed in strong tin or wooden boxes and sent at *purchasers'* risk by mail or at *our* risk by express.

Small orders under 50 cents must contain 5 cents for packing and return postage.

Eggs in original sets, with data, can be furnished when desired.

The following discounts will be allowed on orders for single eggs:—

Ten per cent. on orders amounting to two dollars.

Fifteen per cent. on orders amounting to three dollars.

Twenty per cent. on orders amounting to five dollars.

Twenty-five per cent. on orders amounting to ten dollars or over.

SECOND-CLASS SPECIMENS can be furnished of most species at one-half the price of a first-class one. Parties ordering second-class eggs must name a list of extra eggs to be used as substitutes, in case we are out of those ordered.

Western Grebe.....	\$ 50	Gannet.....	35	Yellow-crowned Night Heron.....	25
Hobbes's Grebe.....	50	Anhinga.....	25	Limpkin.....	1 25
Horned Grebe.....	35	Cormorant.....	50	King Rail.....	20
American Eared Grebe.....	25	Double-crested Cormorant.....	35	Clapper Rail.....	10
Pied-billed Grebe.....	10	Florida Cormorant.....	25	Virginia Rail.....	20
Loon.....	1 50	Brand's Cormorant.....	50	Spotted Crane.....	30
Black-throated Loon.....	1 50	Baird's Cormorant.....	50	Sora.....	10
Red-throated Loon.....	75	American White Pelican.....	50	Corn Crane.....	20
Tufted Puffin.....	1 00	Brown Pelican.....	25	Purple Gallinule.....	30
Puffin.....	20	American Merganser.....	1 00	Florida Gallinule.....	12
Cassin's Auklet.....	3 00	Red-breasted Merganser.....	20	European Coot.....	15
Black Gulltremot.....	20	Mallard.....	20	American Coot.....	10
Murre.....	20	Black Duck.....	40	Red Phalarope.....	1 00
California Murre.....	25	Florida Duck.....	2 00	Northern Phalarope.....	50
Brunnich's Murre.....	25	Gadwall.....	50	American Avocet.....	75
Great Auk (cast of egg).....	1 50	Widgeon.....	25	Black-necked Stilt.....	75
Razor-billed Auk.....	26	Baldpate.....	75	European Woodcock.....	1 75
Skuia.....	75	European Teal.....	20	American Woodcock.....	1 25
Parasitic Jaeger.....	60	Blue-winged Teal.....	25	European Snipe.....	25
Long-tailed Jaeger.....	1 25	Shoveller.....	40	Dunlin.....	85
Kittiwake.....	40	Turnfall.....	40	Black-tailed Godwit.....	50
Glaucous Gull.....	85	Wood Duck.....	75	Willet.....	49
Island Gull.....	1 50	Wre-head.....	25	Ruff.....	20
Great Black-backed Gull.....	50	American Scaup Duck.....	60	Karstaudin Sandpiper.....	49
Western Gull.....	25	American Golden-eye.....	75	Spotted Sandpiper.....	15
Herring Gull.....	25	Barrow's Golden-eye.....	1 00	Long-billed Curlew.....	75
American Herring Gull.....	20	Old Squaw.....	40	Whimbrel.....	49
California Gull.....	30	Halepinn Duck.....	1 25	Lapwing.....	15
Ring-billed Gull.....	30	Greenland Gull.....	30	Golden Plover.....	40
Mew Gull.....	35	American Gull.....	20	Killdeer.....	20
Lagochelone Gull.....	50	American Scoter.....	2 00	Ring Plover.....	20
Franklin's Gull.....	75	Ruddy Duck.....	50	Little Ring Plover.....	25
Gull-billed Tern.....	15	White-fronted Goose.....	1 50	Wilson's Plover.....	25
Caspian Tern.....	50	Canada Goose.....	1 00	Oyster-catcher.....	25
Royal Tern.....	40	Whooping Swan.....	1 50	American Oyster-catcher.....	70
Canada's Tern.....	40	Wandering Swan.....	2 50	Bob-white.....	10
Forster's Tern.....	15	American Flamingo.....	1 00	Florida Bob-white.....	15
Common Tern.....	68	Roseate Spoonbill.....	1 00	Texas Bob-white.....	10
Arctic Tern.....	15	White Ibis.....	35	Chickadee-billed Scalded Partridge.....	50
Roseate Tern.....	15	American Bittern.....	1 25	California Partridge.....	10
Least Tern.....	08	Least Bittern.....	20	Valley Partridge.....	20
Sooty Tern.....	75	Great White Heron.....	1 25	Gambel's Partridge.....	25
Bridled Tern.....	2 00	Ward's Heron.....	40	Ruffed Grouse.....	15
Black Tern.....	12	Great Blue Heron.....	25	Willow Ptarmigan.....	75
White-winged Black Tern.....	40	European Blue Heron.....	20	Rock Ptarmigan.....	1 00
Noddy.....	75	American Egret.....	2	Prairie Hen.....	20
Black Skimmer.....	12	Snowy Heron.....	15	Sharp-tailed Grouse.....	75
Fulmar.....	75	Reddish Egret.....	40	Sage Grouse.....	60
Maax Shearwater.....	1 00	Louisiana Heron.....	40	Wild Turkey.....	75
Audubon's Shearwater.....	2 00	Little Blue Heron.....	10	Chachalaca.....	1 50
Stormy Petrel.....	70	Green Heron.....	10	Red-billed Pigeon.....	2 00
Leach's Petrel.....	15	Black-crowned Night Heron.....	10		

FRANK H. LATTIN, ALBION, N. Y.

Mourning Dove.....	03	Prairie Horned Lark.....	20	Bank Swallow.....	14
White-winged Dove.....	30	Desert Horned Lark.....	20	Rough-winged Swallow.....	24
Ground Dove.....	25	Ruddy Horned Lark.....	35	Cedar Waxwug.....	19
Ring Dove.....	75	American Magpie.....	25	Phainopepla.....	50
Turkey Vulture.....	75	Yellow-billed Magpie.....	75	Loggerhead Shrike.....	15
Black Vulture.....	75	Blue Jay.....	05	White-rumped Shrike.....	08
Mississippi Kite.....	10 00	Florida Blue Jay.....	50	California Shrike.....	08
Marsh Hawk.....	40	Florida Jay.....	1 50	Red-eyed Vireo.....	10
Sharp-shinned Hawk.....	1 00	California Jay.....	25	Warbling Vireo.....	20
Cooper's Hawk.....	30	Northern Raven.....	1 50	Yellow-throated Vireo.....	35
Harris' Hawk.....	75	American Crow.....	05	White-eyed Vireo.....	20
Lancian Buzzard.....	35	Florida Crow.....	50	Bell's Vireo.....	15
Red-tailed Hawk.....	60	Northwest Crow.....	50	Prothonotary Warbler.....	30
Western Red-tail.....	75	Fish Crow.....	25	Golden-winged Warbler.....	75
Red-shouldered Hawk.....	50	Starling.....	10	Nashville Warbler.....	75
Red-bellied Hawk.....	1 00	Bobolink.....	20	Parula Warbler.....	25
Swainson's Hawk.....	75	Cowbird.....	03	Yellow Warbler.....	05
Spotted-winged Hawk.....	1 25	Dwarf Cowbird.....	50	Black-throated Blue Warbler.....	75
Ring-legged Hawk.....	50	Yellow-headed Blackbird.....	05	Magnolia Warbler.....	50
Golden Eagle.....	8 00	Red-winged Blackbird.....	02	Chestnut-sided Warbler.....	20
Gray Sea Eagle.....	2 00	Pileolated Blackbird.....	20	Black-poll Warbler.....	75
Bald Eagle.....	5 00	Tricolored Blackbird.....	20	Black-throated Green Warbler.....	75
Buck Hawk.....	3 00	Meadowlark.....	12	Prairie Warbler.....	50
Merlin.....	50	Western Meadowlark.....	12	Oven-bird.....	15
Kestrel.....	25	Hooded Oriole.....	50	Louisiana Water-thrush.....	50
American Sparrow Hawk.....	25	Orchard Oriole.....	10	Maryland Yellow-throat.....	15
Audubon's Caracara.....	1 25	Baltimore Oriole.....	10	Western Yellow-throat.....	25
American Osprey.....	50	Brewer's Oriole.....	35	Yellow-breasted Chat.....	10
American Barn Owl.....	30	Brewer's Blackbird.....	05	Long-tailed Chat.....	15
American Long-eared Owl.....	30	Purple Grackle.....	04	American Redstart.....	15
Short-eared Owl.....	1 25	Bronzed Grackle.....	04	White Wagtail.....	10
Barned Owl.....	1 00	Great-tailed Grackle.....	20	Meadow Pipit.....	10
Florida Barned Owl.....	1 00	Great-tailed Grackle.....	20	American Dipper.....	1 00
Screech Owl.....	40	Purple Finch.....	15	Mockingbird.....	05
Florida Screech Owl.....	50	House Finch.....	06	Catbird.....	02
Texas Screech Owl.....	50	Redpoll.....	50	Brown Thrasher.....	03
California Screech Owl.....	50	American Goldfinch.....	08	Texas Thrasher.....	30
Great Horned Owl.....	1 25	Arkansas Goldfinch.....	20	Curve-billed Thrasher.....	25
Western Horned Owl.....	1 25	Lawrence's Goldfinch.....	25	California Thrasher.....	25
Hawk Owl.....	1 00	Snowflake.....	50	Cactus Wren.....	12
Burrowing Owl.....	55	Lapland Longspur.....	75	Carolina Wren.....	15
Crow-billed Noddy.....	1 00	Grass Finch.....	05	Gewick's Wren.....	50
Yucatan-billed Cuckoo.....	10	Western Vesper Sparrow.....	15	Vigors' Wren.....	25
California Cuckoo.....	25	Savanna Sparrow.....	12	Baird's Wren.....	25
Texas-billed Cuckoo.....	12	Western Savanna Sparrow.....	20	Cause Wren.....	06
Least Kingfisher.....	20	Yellow-winged Sparrow.....	50	Western House Wren.....	06
Hairy Woodpecker.....	50	W. Yellow-winged Sparrow.....	20	Long-billed Marsh Wren.....	06
Dowry Woodpecker.....	20	Sharp-tailed Sparrow.....	75	Tule Wren.....	15
Red-bellied Woodpecker.....	1 25	Seaside Sparrow.....	25	White-breasted Nuthatch.....	30
Pileated Woodpecker.....	1 00	Lark Sparrow.....	05	Brown-headed Nuthatch.....	75
Red-headed Woodpecker.....	08	W. Lark Sparrow.....	05	Tufted Titmouse.....	50
Leucis Woodpecker.....	40	Gambel's Sparrow.....	25	Plain Titmouse.....	50
Red-bellied Woodpecker.....	30	White-throated Sparrow.....	30	Chickadee.....	12
Golden-fronted Woodpecker.....	75	Chipping Sparrow.....	02	Carolina Chickadee.....	15
Yellow-bellied Woodpecker.....	03	Western Chipping Sparrow.....	10	California Bush-Tit.....	10
Red-shafted Flicker.....	10	Field Sparrow.....	04	Verdin.....	50
Chickadee-wildow.....	1 50	Slate-colored Junco.....	20	Blue-gray Gnatcatcher.....	20
Whip-poor-will.....	1 50	Black-throated Sparrow.....	50	Western Gnatcatcher.....	50
Nighthawk.....	40	Song Sparrow.....	02	Wood Thrush.....	06
Western Nighthawk.....	50	Desert Song Sparrow.....	50	Wilson's Thrush.....	15
Chimney Swift.....	15	Boermann's Song Sparrow.....	12	Russet-backed Thrush.....	15
Ruby-throated Hummingbird.....	60	Saturn's Song Sparrow.....	08	Olive-backed Thrush.....	40
Costa's Hummingbird.....	1 00	Swamp Sparrow.....	15	Hermits Thrush.....	40
Anna's Hummingbird.....	50	Towhee.....	25	American Robin.....	12
Scissor-tailed Flycatcher.....	10	Oregon Towhee.....	40	Western Robin.....	05
Kingbird.....	03	California Towhee.....	08	Red-spotted Bluethroat.....	60
Gray Kingbird.....	40	Cardinal.....	05	Whetoeat.....	10
Arkansas Kingbird.....	08	Texas Cardinal.....	50	Bluebird.....	02
Cassin's Kingbird.....	25	Rose-breasted Grosbeak.....	15	Western Bluebird.....	15
Ash-throated Flycatcher.....	25	Black-headed Grosbeak.....	20	Mountain Bluebird.....	15
Crested Flycatcher.....	12	Blue Grosbeak.....	05	English Sparrow.....	01
Phoebe.....	05	Indigo Bunting.....	05	European Tree Sparrow.....	15
Say's Phoebe.....	20	Lazuli Bunting.....	20		
Black Phoebe.....	20	Painted Bunting.....	10		
Wood Pewee.....	15	Grassquit.....	75		
Western Wood Pewee.....	20	Black-throated Bunting.....	05		
Western Flycatcher.....	55	Lark Bunting.....	50		
Acadian Flycatcher.....	20	Scarlet Tanager.....	25		
Little Flycatcher.....	40	Summer Tanager.....	20		
Trail's Flycatcher.....	20	Purple Martin.....	15		
Least Flycatcher.....	19	Chiff Swallow.....	04		
Sky Lark.....	12	Barn Swallow.....	05		
		Tree Swallow.....	15		
				SUNDRIES.....	
				African Ostrich, small.....	1 25
				"    "    large.....	1 50
				Emu.....	2 50
				Ileka.....	3 00
				Alligator.....	20
				Turtle.....	10
				Snake.....	10
				Gopher.....	25

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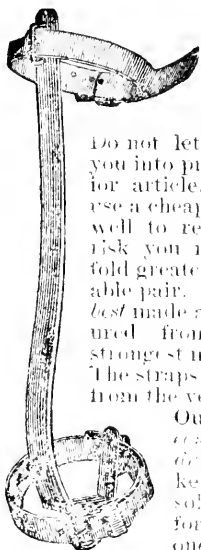
FRANK H. LATTIN, ALBION, N. Y.

**BIRDS SKINS.**

While we do not carry a full stock of Bird Skins, we have made arrangements whereby we can furnish our patrons anything obtainable at prices quoted in Feb. Oologist. Orders under \$1.00 not wanted.

Faithfully Frank H. Lattin.

**Climbing Irons.**



There is scarcely a month in the year but what a pair of good Climbing Irons comes handy

Do not let a low price lure you into purchasing an inferior article. Every time you use a cheap pair of irons, it is well to remember that the risk you run is a hundred-fold greater than with a reliable pair. Our irons are the best made and are manufactured from the best and strongest material obtainable. The straps are wide and made from the very best of leather.

Our climbers are the easiest, safest and most dependable on the market and cannot be sold at a living profit for less money by anyone.

During the past five years we have sold hundreds of pairs of climbers, have sent them to nearly every state and territory in the Union and have yet to hear of the first dissatisfied purchaser.

From many testimonials, we select the following:

"The climbers that you sent give entire satisfaction and are well made in every particular."

T. V. W., Austin, Ills.

"Received my climbers all right on the 21st of last month. Have deferred writing to you till I had used them. They are as good a spurs I ever tried and I think I am safe in saying that if you buy your spurs of Lattin, you get good ones."

J. P. J., Kelton, Pa.

"All the supplies ordered came duly to hand, all O. K. Am more than pleased with them all. The climbing irons are just what I wanted; the book of data is immense and the Naturalist's Guide is well worth the price. I wish to compliment you on your method of packing. The goods that I received could hardly have been better fixed for transportation. Am more impressed with your promptness every time I order; and in future, let me say, if there is anything in your line that I need, you may be sure that I shall give you the preference."

H. C. O., Shelburne Falls, Mass.

Our prices are as follows: Strapped ready for use, by express, at purchaser's expense, \$2.50, or prepaid to any part of the United States, \$3.25. Climbers without straps by express, \$1.50, prepaid, \$2.00.

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 ALBION, N. Y.

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DR. HUMPHREYS' SPECIFICS are scientifically and carefully prepared prescriptions, used for many years in every latitude with success, and for over thirty years used by the people. Every single Specific is a special cure for the disease named.

These Specifics cure without drugging, purging or reducing the system, and are in fact and deed the sovereign remedies of the World.

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3	Crying Colic, or Teething of Infants	.25
4	Diarrhoea, of Children or Adults	.25
5	Dysentery, Gripping, Bilious Colic	.25
6	Cholera Morbus, Vomiting	.25
7	Coughs, Cold, Bronchitis	.25
8	Neuralgia, Toothache, Faceache	.25
9	Headaches, Sick Headache, Vertigo	.25
10	Dyspepsia, Bilious Stomach	.25
11	Suppressed or Painful Periods	.25
12	Whitese, too Profuse Periods	.25
13	Croup, Cough, Difficult Breathing	.25
14	Salt Rheum, Erysipelas, Eruptions	.25
15	Rheumatism, Rheumatic Pains	.25
16	Fever and Ague, Chills, Malaria	.50
17	Piles, Blind or Bleeding	.50
18	Catarrah, Iritis, Oedema, Colic of the Head	.50
19	Whooping Cough, Violent Coughs	.50
20	General Debility, Physical Weakness	.50
21	Kidney Disease	.50
22	Nervous Debility	1.00
23	Uterinary Weakness, Writting Bed	.50
24	Diseases of the Heart, Palpitation	1.00

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It is just the thing for taxidermists, as it will kill without spoiling the game and makes no report.

Sample prepaid 15 cts., 4 for 50 cts.

Iron frame, leather loop, straps of best kind of rubber. Send for sample at once and practice on the Sparrows. Address,

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BIRDS, MAMMALS & EGGS,  
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PAGES

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THE NEW CATALOGUE

OF

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Orleans Co.,

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In this issue of THE OOLOGIST we give our regular prices for

BIRDS' EGGS, GLASS EYES,

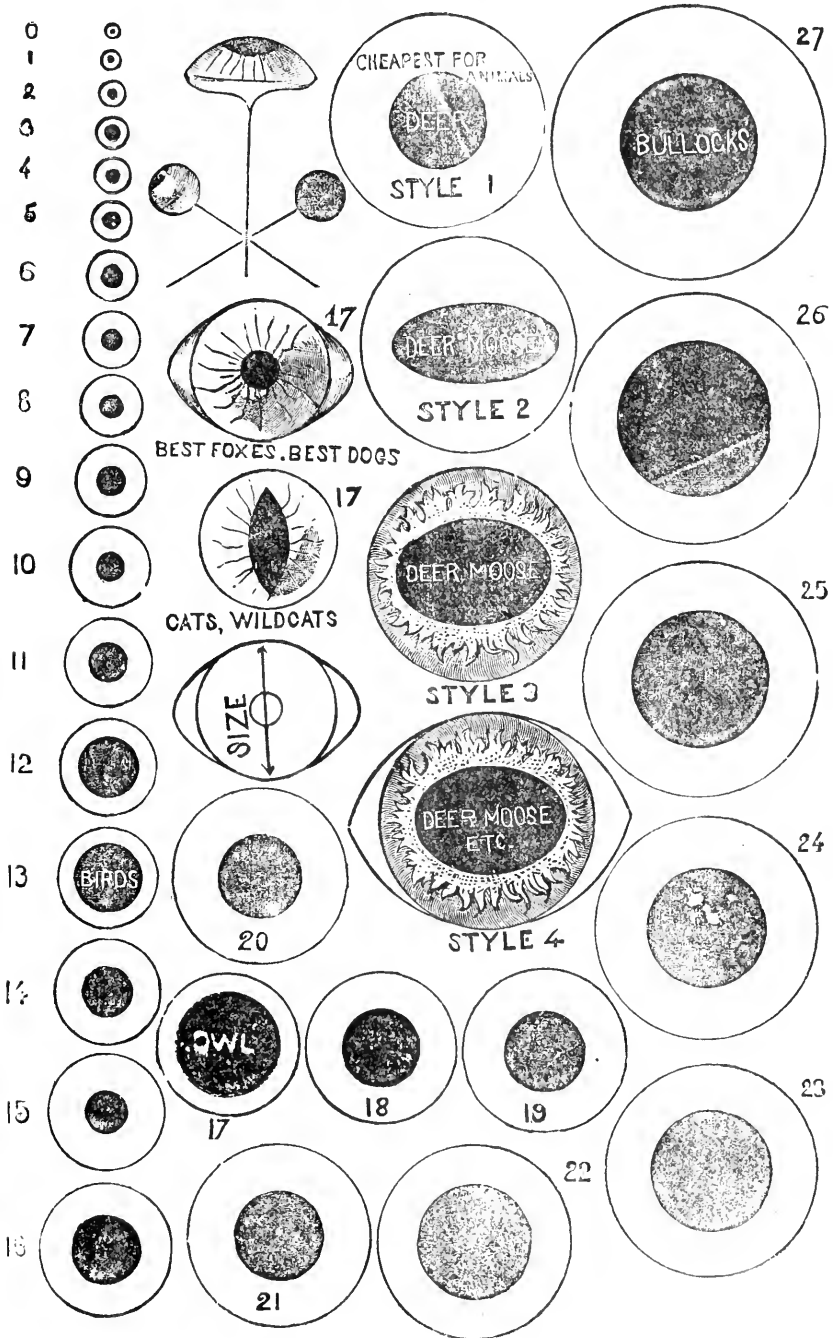
AND SHELLS,

FOR 1890.

If you are not already a subscriber of THE OOLOGIST it will be mailed you during 1890 as a premium with your first order of \$2.00 or over—this offer holds good until 1890. Send in your orders early and often. Make your remittances in most convenient manner. Remember we always

⇒! Guarantee © Satisfaction! ⇐

With every order we fill. "Extras" are usually packed with orders of \$1.00 or over in order to keep our patrons good natured.



# PRICE-LIST OF GLASS EYES

—FOR—

TAXIDERMISTS, MILLINERS, JEWELERS, ETC.

Our eyes are of the best average make in the world, accurate to nature, free from defects, durable, and uniform in color, size and shape.

SIZES.		STYLE 1 FOR BIRDS ETC.		STYLE 2 1 EXTRAS.	STYLE 3 2 EXTRAS.	STYLE 4 3 EXTRAS.	BLACK, CHEAP FOR BIRDS, ETC.		IMPERIAL NUMBER.
NO. ON DIAGM	DIAM. IN INCHES.	1 Pr.	10 PPS.	1 Pr.	1 Pr.	1 Pr.	1 Pr.	10 Pr.	
0	2-32	.02	.20	...	....	....	.01	.01	0
1	3-32	.03	.25	.03	....	....	.01	.04	1
2	4-32	.02	.25	.03	....	....	.01	.04	2
3	5-32	.03	.30	.04	....	....	.01	.04	3
4	6-32	.03	.30	.04	....	....	.01	.07	4
5	7-32	.04	.35	.05	....	....	.01	.07	5
6	8-32	.04	.40	.05	.08	....	.01	.08	6
7	9-32	.05	.40	.06	.08	....	.02	.10	7
8	10-32	.06	.50	.06	.10	...	.02	.12	8
9	11-32	.07	.60	.07	.10	....	.02	.13	9
10	13-32	.07	.65	.09	.12	.13	.02	.15	10
11	14-32	.09	.85	.10	.13	.14	.03	.17	11
12	15-32	.10	.95	.11	.14	.16	.03	.18	12
13	16-32	.12	1.10	.14	.18	.20	.03	.21	13
14	17-32	.13	1.25	.18	.19	.22	.04	.29	14
15	18-32	.15	1.45	.19	.21	.24	.05	.37	15
16	10-16	.17	1.65	.22	.23	.27	.05	.42	16
17	11-16	.19	1.85	.24	.26	.29	.06	.50	17
18	12-16	.22	2.10	.26	.29	.34	.07	.58	18
19	13-16	.26	2.50	.29	.32	.37	.08	.61	19
20	14-16	.30	2.90	.32	.37	.46	.11	.92	20
21	15-16	.32	3.15	.37	.40	.51	.12	1.00	21
22	1	.41	4.00	.48	.56	.64	.15	1.25	22
23	1 2-16	.45	4.40	.58	.64	.72	.18	1.45	23
24	1 3-16	.54	5.25	.67	.76	.88	.20	1.65	24
25	1 4-16	.58	5.65	.72	.80	.96	.25	2.10	25
26	1 5-16	.72	7.10	.76	.96	1.04	.30	2.50	26
27	1 7-16	.80	7.90	.96	1.04	1.12	.35	2.90	27

For Sizes, see preceding page. For full description of Styles, see next page.

### DISCOUNTS.

Orders of \$1.00 or under at list price.

Orders of over \$1.00, 20 per cent. off list.

Orders of over \$5.00, 20 & 10 per cent. off list.

EXAMPLE:—A selection of Eyes at \$2.00 list, less 20 per cent., will cost you \$1.60 net; a selection of Eyes at \$8.00 list, less 20 and 10 per cent., will cost you \$5.76 net (e. g. \$8.00 less 20 per cent., = \$6.40; \$6.40 less 10 per cent., = \$5.76).

All orders for less than ten pairs of one number will be figured at single pair rates. We *prepay* postage or express charges on all eye orders.

When ordering, always give size, color, style (naming the extras) and name of animal if possible, then we will be sure to send you exactly what you want. Cornered eyes are measured the narrow way.

## DESCRIPTION OF STYLES.

**BLACK EYES** are used extensively for manufacturing purposes and for small birds. Some taxidermists use them in cheap work for animals and a few of the larger birds.

**STYLE 1** is a plain eye with clear or colored iris and round black pupil. This style is best for birds and is the plainest for Animals.

**STYLE 2**, the following come under this style:—All eyes for Albino Birds and small Albino Animals; *ONE extra*, elongating pupil or veining iris, added to style 1; Common Eyes for Fish, Frogs and Alligators. This style is considered fair for Animals.

**STYLE 3**. Eyes having *TWO extras* added to style 1 and best eyes for Fish and Alligators. This style is considered fine for Animals.

**STYLE 4**. Eyes having *THREE extras* added to style 1 and for large Albino Animals come under this style. Finest grade for Animals.

**EXTRAS**. The grading of styles is based chiefly upon the *extras*, which consist of *Veining the Iris; Elongating the Pupils; or White Corners*.

The addition of any one *Extra* to the common Eye, Style 1, makes it **STYLE 2**; Two *Extras*, **STYLE 3**; Three *Extras*, **STYLE 4**.

### DESCRIPTION OF THE EYES THAT WE KEEP IN STOCK.

#### STYLE 1.

Brown Iris, sizes.....	1 to 27
"Dark" hazel " ".....	1 to 27
Yellow " ".....	1 to 22
Straw " ".....	1 to 22
Carmine " ".....	1 to 17
White " ".....	1 to 16
Red-brown " ".....	1 to 16
Green " ".....	1 to 16
Blue " ".....	1 to 15
Clear, transparent flint iris, sizes.....	1 to 27

The Flint eyes can be painted any color desired; with a stock of them and tube paints, any variety of color can be had at once.

#### STYLE 2.

Albino.—Pink pupil, pink iris, sizes.....	1 to 17
Elk, Moose or Caribou.—Long pupil, brown iris, sizes.....	16 to 27
Sheep or goat.—Long pupil, very light brown iris, sizes.....	16 to 27
Fox.—Brown veined iris, sizes.....	14 to 18
Dog or Bear.—Hazel veined iris, sizes.....	10 to 20

#### Clear Glass, Flint Iris for Painting.

Long pupils, for goat, sheep, deer, cat, lynx, frogs, alligator, etc., etc., sizes..... 6 to 27

White Corners, for various Animals, sizes..... 6 to 27  
Fish Eyes, irregular pupil, sizes..... 6 to 24

#### STYLE 3.

Long pupil with veined green, yellow, straw or brown iris. For cat, leopard, lynx, panther, etc., sizes..... 6 to 26  
Round pupil, veined yellow iris. For tiger and lion, sizes..... 16 to 27  
Round pupil, veined brown or hazel iris, white corners. For fox, dogs, bears, large animals, sizes..... 10 to 27  
Irregular pupils, silver, gold, green or bronze iris. For fish, sizes..... 8 to 24

#### Painted Eyes.

Long pupil, veined iris for alligator, cat, tiger, lynx, etc. Sizes..... 6 to 27  
Round pupil, veined iris, white corners. For Animals, sizes..... 10 to 27

#### STYLE 4.

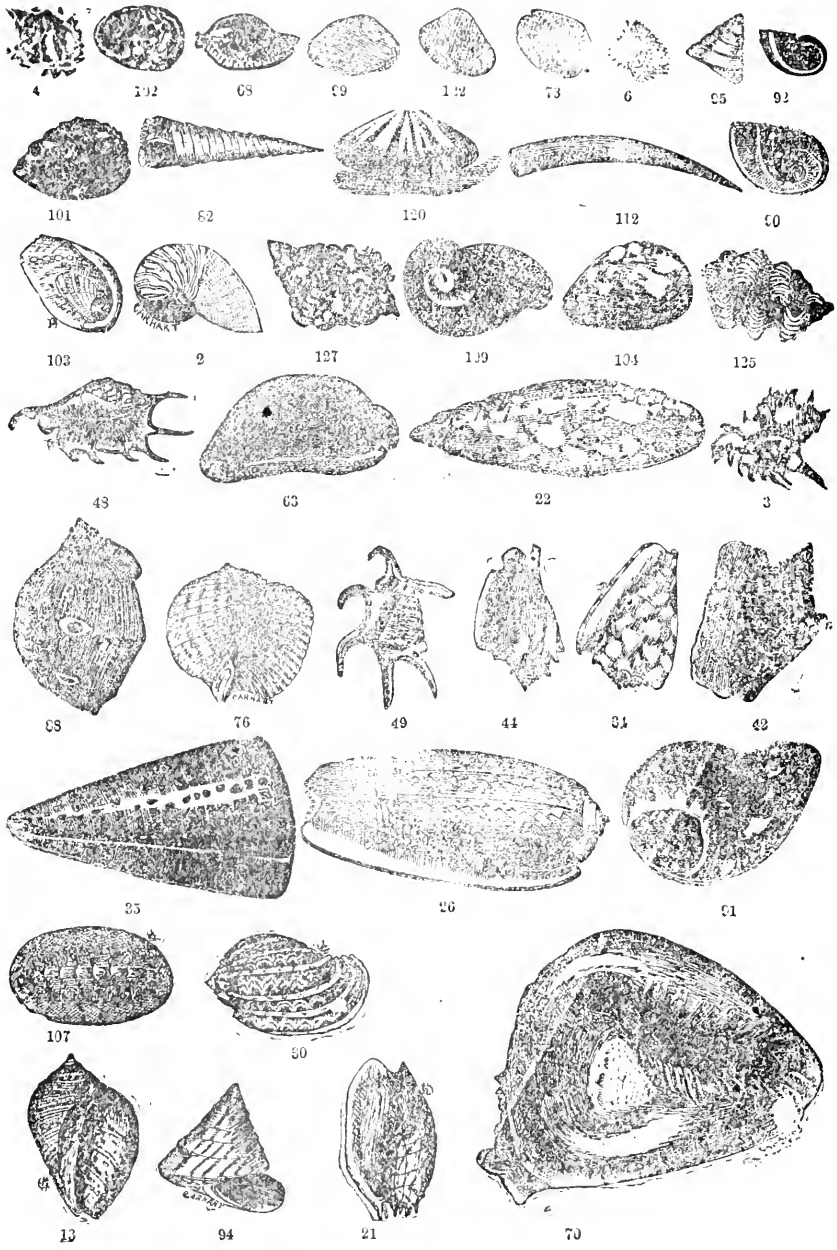
Long pupils, veined iris, white corners. For elk, moose, deer, antelope, sheep, goat, fox, etc. Sizes..... 15 to 27  
Pink pupil, pink iris, white corners. For large Albino animals. Sizes..... 18 to 27

### List of the Sizes and Colors of Eyes Usually Orderd by Leading Taxidermists for Various Birds and Animals.

12 to 14	Red, Loon.	1	Black, Canary.	20 to 22	Antelope.
18 to 21	Yellow or Straw, Horned Owl.	8 to 9	Yellow or Brown, Sharp-shinned Hawk.	15 to 17	Common Bear.
17	Hazel or Blue-black, Barred Owl.	12	Red, Goshawk.	17 to 18	Grizzly Bear.
12 to 14	Yellow or Straw, Long Eared Owl.	12	Yellow, Young "os-hawk.	23 to 25	Lion.
14 to 15	Yellow or Straw, Screech Owl.	2	Black, Warblers.	21 to 22	Puma.
11	Straw, Common Gull.	10	Hazel, Night Hawk.	16 to 18	Wild Cat.
8 to 9	Various Colors, Ducks.	15	Hazel, Ostrich.	17 to 18	*Lynx.
10 to 11	Red, Wood Duck.	3 to 5	Hazel Sparrows.	25	Buffalo (African).
13	Hazel, Goose.	3 to 5	Black " "	26 to 27	Ox.
10	Hazel, Woodcock.	7	Blue Jay.	16 to 18	Wolf.
8	Hazel, Snipe.	7 to 8	Yellow, Red, or Brown " "	17 to 18	Pug Dog.
7	Brown or Hazel, Quail.	14 to 16	Yellow, Straw, Pelican.	15 to 16	Black and Tan Dog.
9	Brown or Hazel, Grouse.	15	Yellow, Sandhill Crane.	16 to 18	Setter Dog.
12 to 13	Brown, Peacock.	8	Straw, Acadian Owl.	17 to 18	Bull Dog.
13 to 14	Straw or Yellow, Great Blue Heron.	12	" Hawk Owl.	16 to 17	Fox.
8	Straw, Egrets.	5	Parrot.	14 to 15	Wild Rabbit.
10	Yellow or Straw, Bittern.	15	Albatross.	12 to 14	Coon.
12 to 14	Brown, Red Tail Hawk.	10 to 12	Straw, Cooper's Hawk.	16 to 17	Jack Rabbit.
13 to 14	Yellow, Osprey.	18	Yellow or Straw, Snowy Owl.	6	White Rats.
15	Straw, Adult Eagle.	22 to 23	Camel.	7	Mink.
15	Hazel, Young " "	21 to 25	Deer.	8	Skunk.
9	Hazel, Crow.	24 to 25	Caribou.	10	Gray Squirrel.
7	Hazel, Robin.	26 to 27	Moose and Elk.	11	Fox Squirrel.
6 to 7	Straw, Grackle.	24 to 25	Black Tail Deer.	8	Red Squirrel.
		24 to 25	Buffalo.	15 to 17	Cat.
		25 to 26	Horse.	15	Coyote.
				16	Artic Fox.
				24	Bengal Tiger.
				9 to 12	Monkey.

ILLUSTRATIONS OF SHELLS.

The numbers beneath each illustration correspond with numbers used in price-list





## FRANK H. LATTIN, ALBION, N. Y.

- 40 MILES SOLDIER, CONUS MILES, Linn., Ceylon, 2 to 3 in. . . . .10 to .35
- 41 WAVEY CONE, 1½ to 1¾ in. . . . .05 to .15
- 42 CONCH or FOUNTAIN SHELL, STROMBEUS GIGAS, Linn., Bahamas, 6 to 12 in. . . . .15 to .50
- 43 POINTS or CONES cut from No. 42 for ornament, painting or decorating. . . . .25 to .75
- 44 STROMBEUS ALATUS, Gmel., Gulf of Mexico, 2 to 3½ in. . . . .10 to .30
- 45 STROMBEUS GRACILOR Wood, Panama, 2 to 3 in. . . . .15 to .30
- 46 STROMBEUS LIPUBERULATUS, Lam., Bahamas, 3 in. . . . .10 to .25
- 47 SILVER-LIP, STROMBEUS LESIGINOSUS, Zanzibar, 2½ to 3 in. . . . .05 to .15
- 48 SPIDER SHELL, PTEROCERA LAMBS, Linn., China or Zanzibar, 4 to 12 in. . . . .15 to 1.00
- 49 HOOKED SCORPION, PTEROCERA (Harpago) RUBROSA, Sowb., Mauritius, 4 to 6 in. . . . .15 to .40
- 50 SCORPION, PTEROCERA (Harpago) CHIRAGARA, Lam., East Indies, 6 to 10 in. . . . .15 to .75
- 51 ORANGE SCORPION, PTEROCERA AURANTIA, Linn., China, 2½ to 3 in. . . . .10 to .35
- 52 PELICAN'S TONGUE, APOKRAVIA PSEPHIDACTYL, Lam., Mauritius, 2 in. . . . .05 to .10
- 53 ARABIAN COWRY, CYPRÆA ARABICA, Linn., 1 to 2 in. . . . .10 to .25
- 53a GNAWED COWRY, CYPRÆA EROSA, Linn., Polynesia, ½ to 1½ in. . . . .05 to .15
- 54 CYPRÆA ISABELLA, Linn., Mauritius, ½ to 1½ in. . . . .05 to .15
- 55 ZEBRA COWRY, CYPRÆA ASELLUS, Linn., East Indies, ½ in. . . . .05 to .10
- 56 SNAKE-HEAD COWRY, CYPRÆA CAPUT-SERPENTIS, Linn., Ceylon, 1 in. . . . .05 to .10
- 57 CAURI COWRY, CYPRÆA CAURICA, Lam., Ceylon, ½ to 1½ in. . . . .05 to .10
- 58 CYPRÆA BELGOLA, Linn., Amboina, ½ to 1 in. . . . .05 to .10
- 59 LYNX COWRY, CYPRÆA LYNX, Linn., Singapore, 1 to 2 in. . . . .05 to .15
- 60 MOURNING COWRY, CYPRÆA MAURITIANA, Linn., Mauritius, 2 to 4 in. . . . .05 to .50
- 61 MONEY COWRY, CYPRÆA MONETA, Linn., Ceylon, ½ to 1 in. . . . .05 to .10
- 62 MOLE COWRY, CYPRÆA TALPA, Linn., Zanzibar, 2 to 3 in. . . . .10 to .30
- 63 TIGER COWRY, CYPRÆA TIGRIS, Linn., Australia, 2½ to 4 in. . . . .05 to .25
- 64 TIGER COWRY with Lord's Prayer engraved on. . . . .25 to .50
- 65 PANTHER COWRY, CYPRÆA PANTHERINA, Sol., India or Oceania, 2 to 3 in. . . . .10 to .35
- 66 CALE COWRY, CYPRÆA VIRELLUS, Linn., Ceylon, 1 to 2 in. . . . .05 to .15
- 67 SPOTTED COWRY, CYPRÆA EXANIPSA, 2 to 4 in. . . . .15 to .35
- 68 EGG SHELL, OVOLUM OVUM, Linn., Singapore, 2 to 3 in. . . . .15 to .30
- 69 TRIVIAS, ½ to ¾ in. . . . .02 to .10
- 70 HELMET SHELL, CASSIS MADAGASCARENسيس, Lam., Reunion, 4 to 10 in. . . . .35 to 1.00
- 71 YELLOW HELMET, CASSIS CORNUCA, Brug., Ind. Oceania, 5 to 9 in. . . . .50 to 1.00
- 72 BLACK HELMET, CASSIS TUBEROSA, Lam., Bahamas, 5 to 8 in. . . . .50 to 1.00
- 73 CAMEO SHELL, BULIMUS FILICORNIS, Linn., Zanzibar, 2½ to 6 in. . . . .10 to .50
- 74 CAMEO SHELLS with a cameo head cut on for only. . . . .2.00
- 75 CASSIS FLAMMEA, Linn., West Indies, .35 to .75
- 76 CASK SHELL, DOLIUM PERDIX, Linn., Bahamas and China, 2 to 4 in. . . . .10 to .50
- 77 MALEA RINGENS, Swains, Pacific. . . . .50 to 1.00
- 78 NATICA CANCRENA, Linn., West Indies, ½ to 1 in. . . . .05 to .10
- 79 STAIR-CASE SHELL, SOLARIUM PERSPECTIVUM, Linn., Zanzibar, 1½ in. . . . .50
- 80 TECTARIUS MURICATUS, Linn., Bahamas, .02 to .65
- 81 WORM SHELL, VERMETUS (vermiculus), LUMBRICALIS, Linn., 2 to 3 in. . . . .05 to .10
- VERMETUS CLUMPS. . . . .05 to 5.00
- 82 STREW SHELL, TURITELLA, 1½ to 5 in. . . . .02 to .35
- 83 BLEEDING TOOTH, NERITA PELEPONTA, Linn., W. I., ½ to 1½ in. . . . .02 to .10
- 84 NERITA TESSELLATA, Gmel., W. I., ¾ in. . . . .02 to .05
- 85 NERITA ZIGZAG, Bahamas, ¾ in. . . . .05
- 86 TOP SHELL, TURBO MARMORATUS, Linn., China, 3½ to 7 in. . . . .25 to .75
- 87 GREEN SNAIL, 3 to 4 in. . . . .25 to .50
- 88 SPOTTED SNAIL, 3 to 4 in. . . . .25 to .50
- 89 BANDED SNAIL, 3 to 4 in. . . . .25 to .50
- 90 PEARL SHELL, 3 to 9 in. . . . .25 to 2.00
- 91 TURK'S CAP, TURBO SAROMATICUS, Linn., East Indies, 2 to 4 in. . . . .15 to .75
- 92 GOLD MOUTH, TURBO (Senectus) CHRYSOTOMA, Linn., Philippines, 2 to 2½ in. . . . .15 to .50
- 93 TROCHUS MAXIMUS, China, 3 to 5 in. . . . .25 to .50
- 94 TROCHUS NILOTICUS, Linn., China, 2½ to 4 in. . . . .15 to .50
- 95 PEARL TROCHUS, 2 to 5 in. . . . .15 to .75
- 96 TROCHUS (Lacout) FICA, Linn., Bahamas, 1 to 3 in. . . . .10 to .50
- 97 MAGPIE TROCHUS, 2 to 3 in. . . . .20 to .50
- HALIOTIS or EAR SHELLS, Nos. 98 to 164.
- 98 HALIOTIS CRACHERODI, Linn., Cala., 8 to 8 in. . . . .15 to .50
- 99 GREEN EAR, HALIOTIS IRIS, Gmel., Japan, 3 to 6 in. . . . .25 to 1.50
- 100 HALIOTIS RUFESCENS, Swains., Cala., .25 to .75
- 101 HALIOTIS SPLENDENS, Reeve, Cala., 6 to 9 in. . . . .25 to .75
- 102 BLACK EAR, Japan, 3½ to 7 in. . . . .25 to 1.00
- 103 WHITE EAR, HALIOTIS TUBERULATA, New Zealand, 4 to 8 in. . . . .25 to 1.50
- Unpolished shells. . . . .15 to .20
- 104 RED EAR, Cala., 5 to 8 in. . . . .50 to 2.00
- 105 KEY-HOLE LIMPET, FISSURELLA BARBADENSIS, Lam., Bahamas, 1 to 1½ in. . . . .03 to .10
- 106 OWL SHELL, LOTTIA GIGANTIA, Sowb., Cal., 4½ to 3 in. . . . .05 to .15
- 107 SCALEY-RIBBED CHITON, CHITON SQUAMOSUS, Linn., Bahamas, 1½ to 2 in. . . . .05 to .10
- 108 COIL SHELL, HELIX (ICAVUS) BEAMASTOMA, Linn., Ceylon, 2 in. . . . .05 to .15
- 109 BLACK-MOUTH SNAIL, HELIX (ICAVUS) MELASORAGUS, Both, Ceylon, 2¼ to 2¾ in. . . . .10 to .25
- 110 AGATE SHELL, ACHATINA VARIEGATA, West Africa, 3½ to 4½ in. . . . .35 to .50
- 111 PEANUT-SHELL, STROPHIA GLASS, Kuch, Bahamas, ½ to 1 in. . . . .03 to .10
- 112 TUSK SHELL, DENTALIUM ESTALIS, 1½ in. . . . .02 to .05
- 113 WATERING-POT SHELL, ASPERGILLUM VAGINIFLORUM, Lam., Red Sea, 7 in. 1.50 to 2.00
- 114 ANGEL WING, PHOLAS COSTAS, Linn., Florida, 5 to 6 in., single valve. . . . .15 to .50
- 115 RAZOR SHELL, SOLES ENNIS, Linn., N. J., 8 to 6 in. . . . .10 to .30

FRANK H. LATTIN, ALBION, N. Y.

- 116 CALLISTA GIGANTEA, Chemn. Florida, 3 to 5 in. . . . .10 to .30
- 117 CLAM, VENUS MERCENARIA, Linn. Atlantic, 2 to 4 in. . . . . .05
- 118 ASAPHIS COCCINEA, Mart., Bahamas, 1½ to 2½ in. . . . . .05 to .20
- 119 VENUS LAITERI, Bahamas, 2 to 3 in. . . . .10 to .25
- 120 SUN SHELL, TELLINA RADIATA, Linn., Bahamas, pink, 1½ to 3 in. . . . . .03 to .25  
Yellow variety of same. . . . . .03 to .25
- 121 QUIT-SHELL, DOCINA DISCUS, Reeve, Florida, 2 to 3 in. . . . . .05 to .25
- 122 COCKLE SHELL, CARDIUM PSEUDOLIMA, Lam., E. I., 3 to 5 in. . . . . .35 to 1.00
- 123 HEART SHELL, CARDIUM MAGNUM, Born., Florida, 3½ to 4 in. . . . . .15 to .35
- 124 CHAMA ARCINELLA, Linn., W. I., 1 in. . . . . .05 to .15
- 125 FURBLO CLAM, TRIDACNA SQUAMOSA, Lam., East Indies, 5 to 12 in. . . . . .25 to 2.00
- 126 GIANT CLAM, TRIDACNA GIGAS, Lam., East Indies, 2 to 3 feet. . . . .19.00 to 25.00
- 127 EAST INDIA CLAM, HORSE-FOOT or SPOTTED CLAM, TRIDACNA (*Hippopus*) MACULATA, Lam., E. I., 3 to 11 in. . . . .15 to 2.00
- 128 LUCINA PENNSYLVANICA, Bahamas, 1½ to 2 in. . . . . .10 to .15
- 129 SCALLOP, PECTEN IRRADIANS, L. I., 1 to 3 in. . . . . .05 to .25
- 130 ENGLISH SCALLOP, 4 to 5 in. . . . . .10 to .25
- 131 SUN AND MOON SHELL, PLEURONECTIA JAPONICA, Gmel., Japan, 4 to 5 in. . . . .15 to .50
- 132 HAM SHELL, PERNA EPHIPPIMUM, Linn., Bahamas, 1½ to 3 in. . . . . .15 to .35
- 133 FAN SHELL, PINNA MURICATA, Linn., W. I., 7 to 10 in. . . . . .20 to .50
- 134 THORNY OYSTER, SPONDYLUS PICTURUM, Chemn., L. Cal., 4 to 6 in. . . . . 3.00 to 5.00
- 135 OYSTER, OSTREA VIRGINICA, Gmel., Chesapeake Bay, 3 to 6 in. . . . . .05 to .10

Shells for Painting.

- 136 Mother of Pearl, yellow or light backs, polished, \$3.00 per lb or 25c to \$3.00 each.
- 137 Same as No. 136, unpolished, \$1.25 per lb or 35c to \$2.00 each.
- 138 Mother of Pearl, known as "Black Scotch" dark, iridescent backs, polished, \$3.00 per lb or 25c to \$3.00 each.
- 139 Same as No. 138, unpolished, \$1.00 per lb or 25c to \$5.00 each.
- 140 Sun and Moon Shell or Japanese Pecten, Same as No. 131, one valve highly colored other white. Valves have smooth, white inner surface and are from 4 to 6 in. in diameter. Have sold hundreds to artists. Price per valve, 10c to 25c; per doz., \$1.00 to \$2.00, prepaid. Can quote special rates by the hundred.
- 141 Silver Shell, a thin, translucent shell for painting, of a silvery color, about 3 in. in diameter. 10c each, \$1.00 per doz.

Small Shells, etc.

For Jewelry, Fancy Work, Aquariums and for Taxidermists in Case Work.

- 142 Cowries. 40c per pint, 7c per quart, by mail prepaid, or \$1.50 per gallon by express.
- 143 Olive Shells. Same price as No. 142.
- 141 Little Conchs, *Calinumbellus*, No. 31. Same price as No. 142.
- 145 Valves of *Asaphis*, No. 118. One half the price of No. 142.

- 146 Sun Shells, *Tellina radiata*, No. 120. Same price as No. 142.
- 147 *Nerita* or Bleeding Teeth, No. 83. Same price as No. 114.
- 148 Claw Shells, No. 52. Same price as No. 142.
- 149 Screw Shells, No. 82. Same price as No. 142.
- 150 W. I. Mixed Shells, all small and choice, but run largely to No. 144. Same price as No. 142.
- 151 Gray Sea Beans. Same price as No. 142.
- 152 Red Sea Beans. Same price as No. 142.
- 153 Guinea Peas, Black-eyed Susans. Same price as No. 142.
- 154 Tips and Fragments of W. I. Branch Coral, *Hydropora caribbeana*. Same price as No. 142.
- 155 Contains a good mixture of Nos. 142 to 154 inclusive. Price same as No. 142.
- 156 Lice Shells, postpaid, 20c per gill, 60c per pint, \$1.00 per quart; \$2.50 per gal. by express.
- 157 Tips of E. I. Branch Coral, *Pocillipora*. 25c per gill, 75c per pint, \$1.25 per quart.
- 158 Fragments of Organpipe Coral. Price same as No. 157.
- 159 Little Zigzag or Zebra *Neritas*, No. 85, very choice. 30c per 1/2 gill, 50c per gill, \$1.75 per pint, \$3.00 per quart.
- 160 Gem Shells, *Maquillata*, No. 25. Price same as No. 159. This and the last No. are very "toony" little shells and are quite valuable for jewelry purposes as well as fancy work.
- 161 Mammas Seeds from Bahamas. Price one-half that of No. 159.
- 162 Small Fragments of Pink Coral from Sandwich or Caroline Isles. 50c per oz., \$5.00 per lb.
- 163 Small Fragments, Red, same locality as No. 162. 30c per oz., \$4.00 per lb.

SPECIAL NOTICE.—We will furnish samples of any No. from 112 to 163 inclusive at 5c each. We will also furnish any No. in 10c, 15c, 20c, 25c, etc. lots as purchaser may desire. We can furnish Nos. 142 to 156 inclusive, in broken, banded or 100 weight lots as purchaser may desire, at very low rates.



No. 32, Marlinspike.



No. 47, Silver-lip.





# OÖLOGIST.



Monthly.

50c. per Year.

Vol. VII, ALBION, N. Y., APRIL, 1890. No. 4

## Exchanges and Wants.

Brief special announcements. "Wants." "Exchanges" inserted in this department for 25 cents per 25 words. Notices over 25 words charged at the rate of one-half cent per word. No notice inserted for less than 25 cents. Notices which are merely indirect methods of soliciting cash purchasers cannot be admitted to these columns under any circumstances. Terms, cash with order.

FROM MY Exchange notice in the Nov. Oölogist I received about 100 letters; although I had a large number of Eggs to exchange. I could have exchanged more than double the number. W. B. DALEY, Chatham, N. Y.

20 OUTINGS 87 and 88, Evening Grosbeak and other Northern skins for good Southern skins. STEWART E. WHITE, Grand Rapids, Mich.

AUTOGRAPH Papers or Magazines wanted. GEO. E. TRIPP, Box 1405, Woburn, Mass.

MOUNTED photographs of birds, mammals, etc., for the same or for fine crystals, polished agates and fossils. Send a 20 cent specimen for sample photo. E. S. CHENEY, Pittsford, South Dak.

WANTED.—Live Quail and Ruffed Grouse. Will pay cash or give any of the following first-class sets in exchange: Nos. 5b<sup>3</sup>/<sub>4</sub>, 1 a<sup>1</sup>/<sub>4</sub>, 15<sup>1</sup>/<sub>4</sub>, 1-2-1-5, 2-7-1-5, 4-64<sup>1</sup>/<sub>2</sub>, 4-7-1-7, 5-7-1-9, 5-7-1-0, 6-0-1-7, 6-9<sup>1</sup>/<sub>2</sub>. FRED JONES, P. O. Box 54, Martins Ferry, O.

TO EXCHANGE.—Maynard revolving seven shot collecting pistol, 22 cal., 13 inch barrel, val. \$10.00. First class skins wanted in exchange. All answered that enclose stamp. JAMES P. BABBITT, 10 Hodges Ave., Taunton, Mass.

ALASKAN and North-western Curiousities to Exchange, for side blown, first-class Eggs, or fine shells. Write and send lists first. CRIAH L. HERTZ, Kent, Wash.

TO EXCHANGE.—Double-barrel, breech-loading, shot-gun with shells, etc., also Fine Smith & Wesson 22 cal revolver. For rifle, typewriter or other offers. GEORGE A. WILLIS, Colton, Cal.

A GOOD Baltimore No. 1 printing press with two fonts of type, self-inker. To exchange for first-class bird eggs in sets or singles. R. H. THOMPSON, 1109 St. Paul St., Baltimore, Md.

WANTED.—To Exchange a fine set of two eggs of the Golden Eagle first-class with data, for a good typewriter or a good double-barrel, breech-loading shotgun; or will exchange other western eggs for same. Correspondence solicited. A. Y. WILLIAMS, Box 99, Gonzales, Monterey Co., Cal.

WANTED.—TO PURCHASE COLLECTIONS OF INDIAN RELICS AND OTHER CURIOSITIES FOR WHICH CASH WILL BE PAID. PARTIES HAVING SUCH FOR SALE WILL PLEASE CORRESPOND WITH W. H. KING, JACKSONVILLE, ILLS. ayr

American, European and Exotic Butterflies and Moths for cash and in exchange for Birds' Eggs, Birds' skins. All mounted and perfect. Very rare and beautiful specimens from India, Africa and South America; also live coconos from India and Europe to exchange for others of this country. Send for catalogue. PROF. CARL BRAUN, Naturalist, Bangor, Me.

WANTED.—Collectors having well prepared and carefully identified eggs, specimens or curiosities for sale or exchange at low rates. In large or small quantities, will please send their lists and prices. All eggs must be blown through one hole smoothly drilled in the side, and without stains for ink-marks. FRANK H. LATTIN, Albion, N. Y. [16]

TO EXCHANGE.—425 Postage stamps, all different, for best offer of Birds' Eggs. Address, G. B. HATCH, 205 S. Roman St., New Haven, Conn.

TO EXCHANGE.—10 fonts of type and a Fairbank No. 1 printing press as good as new, rollers never been used. For birds' eggs in sets or single, and a few birds' skins. W. C. ROBINSON, 1001 St. Paul St., Baltimore, Md.

For EXCHANGE.—Skins of Western Birds for skins or desirable Eggs in sets. Send lists and receive mine. Only first-class specimens wanted. L. ZELNER, 539 west 18th St. (near Oak), Los Angeles, Cal.

TAXIDERMISTS' Instruments and supplies wanted. Complete set of tools especially desired. Will give first-class sets and singles; also curiosities. CHAS. TURTON, 1350 Flower St., Los Angeles, Cal.

BIRDS' Eggs to exchange for best offer of type-cuts, logotypes and border. Address with impression of type, LYON CHILDRESS, 629 Woodland Ave. Nashville, Tennessee.

WANTED.—To exchange Birds' eggs in sets, with data, and Birds' skins for the same. L. W. NICHOLS, JR., Richmond, Ill.

WANTED.—Good Detective Camera and outfit, 4x5 preferred. Have choice Bird skins, 200 varieties to select from. Also mounted Golden Eagle. Address, THEO. D. HURD, Riverside, Cal.

TO EXCHANGE.—The following first-class skins. A. O. U. Nos.: 622b, 413, 375a, 365, 581c, 519, 530, 455, 556, 552a and 447. Write soon. A. W. NOLTE, W. 16th St., Los Angeles, Cal.

EXCHANGES.—Continued.

TO EXCHANGE.—Rare and Handsome Illinois Birds' Skins and Eggs to exchange for eggs in sets. F. M. WOODRUFF, Curator, Nat. Hlss. Normal School, Englewood, Ills.

I Want, *at once*, a good set of eggs of the Saw-whet or Acadi in OWL. Must be first-class and positively identified. Write, stating cash or exchange price. FRANK H. LATTIN, Albion, N. Y.

TO EXCHANGE.—Indian Arrowheads 4 0 foreign postage stamps books and magic lantern with polyopticon attachment. For Ornithological or Zoological publications or birds' eggs in original sets with full data, address GEORGE H. ROGERS, Jr., P. O. Box 77, Wauwatosa, Wis.

TO EXCHANGE.—A good 38 se Locking Revolver, worth \$4.00, for set of drills, blowpipe, &c. THOS. E. STUART, Corning, Adams Co., Iowa.

FOR Every 25 cents worth of First-class Eggs, skins, Relics or Curiosities, or for each V Nickel without "cents." I will send a Bird and Animal Imitator. CHAS. TURTON, Box 956, Los Angeles, Calif.

EXCHANGE.—Mazon Creek Fossils in Iron Stone, Nodules Ferns and Plants for Marine shells, Star-fish and curios. Wishes fine Indian Relics, Minerals and Fossils in quantity. Wishes to correspond with parties who have large collections for sale or exchange. I wish large, stowey specimens for my exhibit at the coming World's Fair at Chicago. H. D. HILL, Morris, Ill. a3

WANTED.—Collectors who are interested in stamps, to send for my approval sheets at 25 per cent. commission. Twenty-five varieties for 2c. stamp; 100 varieties for 10 cents; 1000 nicely mixed for 25 cents. 101 extra fine from Egypt, Bavaria, Russia, etc., 25 cents. 100 from Argentine Republic, Mexico, Ecuador, etc., 30 cents. Address, MIDDLESEX STAMP CO., box 1267, Natick, Mass.

WILD POTATOES.—See descriptions on another page. If planted they will grow. If kept in a dry place they will keep for years as a curiosity. I will give a good specimen for every 5 cts. worth of good, first-class Birds' eggs, or every perfect arrowhead, or for every foreign or U. S. stamp cat-douged by Scott at 5c. or over, that is sent me before May 1.0th. No exchange will be accepted for less than five specimens or for over 50. Address, FRANK H. LATTIN, Albion, N. Y.

For \$1.00 worth of first-class Eggs or specimens we will give the Oologist for 1890. For 50 cents worth, a card good for one exchange notice in the Oologist; for 25 cents, a card good for inserting name one time in Directory, or for \$2.00 worth of very desirable ones, we will give a copy of Maynard's Birds of Eastern North America (publisher's price for this work is \$ 8.00, cash). Send in your lists of duplicates should you desire to exchange for any of the above. THE OOLOGIST, Albion, N. Y.

**H. D. HILL,** Morris, Ill. Dealer in Wholesale and Retail. Sample by mail, 25 cents. Fine specimen polished Mexican Riochite something new, by mail, from 6 cents to \$2.00. Polished Brazilian Agates, 2 c. to \$1.50. Trilobites 25c. to 50c. Geodes, Dec. to \$1.00. Arrow and Spear Points, 5c. to 50c. Cells and Aes, 40 cents to \$1.00. Other papers, with circulation of 100. copy three times and send bill for anything we advertise. a3



Your name and address will be inserted in any department, 1 month for 10 cts.; 3 months, 25 cts., 6 months, 40 cts.; 1 year, 75 cts. Should you desire to have your name printed in more than one department, one-half of these rates will be charged for each additional one.

Live collectors will not be long in observing the importance of keeping their names standing in the Directory. Collectors and dealers desiring to make sales, purchases or exchanges will not only write to the parties whose names appear in the directory for their addresses, but will also keep them posted on "bargains" that they may have for sale cheap. Publishers having papers, etc., that would be of interest to the persons whose names appear in the Directory, will recognize the importance of placing coupons etc. in the hands of Live Collectors and will act accordingly.

Collectors receive as high as Fifty Letters, Totals, Circulation, Samples, etc. from having their names inserted one time in a copy of only 10 CENTS in the Directory. Address, THE OOLOGIST, Albion, N. Y.

Roy Dosh, of Stuart, Ia., says "The Directory is working wonders for me."

Burlington, Iowa, March 18, 1890  
EDITOR OOLOGIST:

Owing to a recent change in my address, I sent it for publication in your Naturalists' Directory column and since then I have been overburdened with applications for my catalogue and price list of eggs, while I am not a dealer, but a collector.

Dealers are probably bothered in the same way for lists of exchange, eggs, etc. I understood this column was for collectors. The directory is a good thing, but I would suggest that some distinction be made between dealers and collectors.

Yours respectfully,

C. E. CRAM.

[The Naturalists' Directory is not a dealers' Directory, but a collectors' and we trust the readers of the OOLOGIST will in the future bear this in mind.—Ed.]

BIRDS' EGGS.

- N. Pickering, 3114 Bell Ave., St. Louis, Mo.
- D. T. May, Box 156, Poland, O.
- Chas. E. Cram, No. 410 Jefferson St., Burlington, Iowa. [J3]
- H. W. Davis, North Granville, N. Y. [y]
- Roy H. Dosh, Stuart, Guthrie Co., Iowa
- Frank L. Farley, St. Thomas, Ont., Can
- O. E. Crooker, 515 Lake St., Madison, Wis. a3
- D. S. Musser, Aberdeen, South Dakota.

BIRD SKINS.

Frank L. Farley, St. Thomas, Ont., Can

STAMPS.

D. T. May, Box 156, Poland, O.

PHOTO of your future Husband or Wife FREE!  
Send Stamp for Postage. CLIMAX CO. CHICAGO, ILL.

**FREE! © FREE!!**

Sixty Beautiful Bird Cards, Highly Colored, All Different, Mostly True to Nature. The First Set Cost

**HUNDREDS OF DOLLARS TO PRODUCE.**

Had we had these same cards made expressly for our patrons, we could not have furnished them for less than \$2.00 for the set, but a great manufacturing firm published them and packed one card with each package of their goods in order to increase its sale. It was in one of these packages that we first found one of the cards and learned that there were *Sixty, all different*, each representing a different species. We obtained a complete set at once and were so highly pleased with them that we immediately made arrangements whereby each of our patrons can obtain a complete set of sixty cards either free or for a mere song.

Each card is beautifully lithographed in many colors—in most cases—as true to nature as small lithographs can be made of the species represented. The size of each card is 1½x2¼ inches. On the back of each is the manufacturing firm's advertisement and on the bottom of the face—but entirely distinct from the lithograph, so that it can be trimmed, if desired, without injuring the beauty of the card in the least—is their trade mark.

The following is a complete list of the species represented. One species, usually both male and female on each card:

- |                             |                        |                           |
|-----------------------------|------------------------|---------------------------|
| Purple Finch                | Mango Hummingbird      | Baltimore Oriole          |
| Black-throated Blue Warbler | Western Bluebird       | Great Blue Heron          |
| Bluebird                    | Barn Swallow           | Louisiana Tanager         |
| Redstart                    | Black-cap Titmouse     | Lesser Redpoll            |
| Black-throated Bunting      | Belted Kingfisher      | Canada Goose              |
| Catbird                     | American Crow          | American Swan             |
| Hermit Thrush               | Crested Titmouse       | Red-headed Duck           |
| Tree Sparrow                | Black-headed Goldfinch | Red-breasted Rail         |
| Ruby-crowned Kinglet        | Carolina Wren          | American Coot             |
| Savannah Sparrow            | Mealy Redpoll          | Ruby-throated Hummingbird |
| Red-bellied Woodpecker      | Gala Partridge         | Bob-white                 |
| Curlew Sandpiper            | Am. Flamingo           | Downy Woodpecker          |
| Purple Grackle              | Meadow Lark            | Robin                     |
| Plting Plover               | Bobolink               | Black-crowned Night Heron |
| Killdeer                    | Blue Jay               | Wood Duck                 |
| Chestnut-backed Titmouse    | Painted Bunting        | Goosander                 |
| Turtle Dove                 | Pine Finch             | American Egret            |
| Hudsonian Chickadee         | Red-winged Blackbird   | Cormorant                 |
| Chestnut-crowned Titmouse   | Oregon Snowbird        | Hooded Merganser          |
| Song Finch                  | Am. Widgeon            | Mallard                   |

During 1890 we will present a complete set of these beautiful cards to each of our patrons accepting any one of the following offers:

- 1st. A complete set will be given without any additional expense whatever, to every purchaser of \$1.00 worth of Birds' Eggs at prices quoted in this OOLOGIST.
- 2d. A complete set will be given for each new subscriber you may obtain for the OOLOGIST.
- 3d. For *only sixty cents (60cts.)* we will send you the OOLOGIST for 1890, a copy of the Oologists' Handbook and a complete set of the cards. If you obtain any of your friends to accept this offer it will entitle you to a set of the cards according to offer No. 2.

In case you do not care to accept either offers, No. 1, 2 or 3, but desire a set of the cards, we will furnish them to you as follows: Any one card, your selection, 2cts.; two cards, 3cts.; 12 for 6cts.; 20, our selection, 6cts., or for 12cts. we will send the complete set of sixty cards. Address plainly,

**FRANK H. LATTIN, - ALBION, N. Y.**

# WILD POTATOES.

## GROW YOUR CURIOSITIES.

We have just obtained a limited supply of Wild Mexican Potatoes. When mature they are about the size of a Catbird's egg, or in other words average about three-fourths of an inch in diameter.

A collector in Vermont, who has raised them, writes as follows:

"Doubtless you have received the Wild Potatoes before this date. I have never seen anything in print describing them in any way. About three years ago my uncle obtained five or six of these wild potatoes from some source, I do not know where. They were taken from the mountains in Mexico. We planted them and they grew well. The vines look a little like common potato vines, but more like watermelon vines. The blossoms resemble closely the common potato. The little tubers do not grow in hills, but more like sweet potatoes or peanuts, on the rootlets which form a network under ground. They yield quite well. I should think they would yield at the rate of nearly 90 bushels per acre. They are quite a curiosity to me and I should think every collector would be interested in them."

S. C. WHEELER.

The samples were very satisfactory and we immediately purchased all we could obtain of them. We desire to introduce them this season and in order to do this, we have made the price very low, viz: We will send by return mail prepaid, two Samples for 5c, five for 10c, 15 for 25c, 50 for 75c, 100 for \$1.25.

We have only a few hundred to spare and we predict that a few wide-awake collectors will make a big thing out of them in making exchanges next winter. Remember they are very prolific, easily grown, and that too in any portion of U. S. Order at once or you may be too late. Address,

**FRANK H. LATTIN. - ALBION, N. Y.**

## RUBBER STAMPS

FOR

## BIRDS' EGGS.

Collectors, now is your chance to get a supply of Rubber Stamps. I will take in exchange Eggs in sets as one-half payment for Rubber Stamps of all kinds. A Self-Inker, Best made, from 1 to 4 lines, for Envelope Corners, etc., Only 85 cts. Formerly \$1.50.

Self-Inker, Large Size, for Letter Heads, Data Blanks, etc., Only \$1 90. Others ask from \$2.00 to \$3.50 for same stamp.

Self-Inking Dating Stamp, complete, Only \$1.50, others ask \$3.00 for this same stamp.

Send List of Eggs with description of stamp wanted. All kinds and makes for sale or exchange. Always inclose stamp for reply.

Satisfaction Guaranteed.

Don't Let this Chance Go By, it may not appear again.

Address all Orders to

**H. E. BERRY & CO.,**  
**DAMARISCOTTA, ME.**

THE MARCH 1899 OOLOGIST contains full and instructions for making a Bird or Mammal Skins. A copy will be mailed you for 5 cts., or 6 copies for 25 cts.

21

## Improved Pocket Gun or Snip Snap.



The new Improved Pocket Gun requires no powder, no caps, is neatly finished, durable and can be carried in the pocket, as it weighs only three ounces. Will shoot shot or bullets with accuracy and force and with a little practice will kill birds on the wing or bring them down from the highest tree.

It is just the thing for taxidermists, as it will kill without spoiling the game and makes no report.

Sample prepaid 15 cts., 4 for 50 cts.

Iron frame, leather loop, straps of best kind of rubber. Send for sample at once and practice on the Sparrows. Address,

**FRANK H. LATTIN, - ALBION, N. Y.**

# THE OOLOGIST.

VOL. VII.

ALBION, N. Y., APRIL, 1890.

NO. 4

## Caged Eagles.

While on a deer hunt at a lumber camp in the northern peninsula (Iron Co.) I collected a few birds of which I had need, thus calling the attention of Mr. Bethel Bristol, scaler of the camp, to my ornithological tastes. He very kindly took considerable interest in me, promised to try to secure one or more of the Ravens that are found there and proposed that we set a trap for owls. Of course I assented and we immediately set about it. Cutting several stout poles about eight feet high and driving them into the soft mud of the river, we adorned the tops with steel traps suitably baited with the remains of an unfortunate Canada Jay.

Luck was against us during my stay, but some time after I had returned home, Mr. Bristol wrote that he had caught a fine Bald Eagle, asking if I knew of anybody who would like a pet of that description. You may be sure I lost no time in announcing my entire willingness to become its owner.

On New Year's morning the box arrived and I was, to say the least, somewhat surprised to find, not one, but two fine Eagles. One was a typical "Baldy" and was immediately dubbed Bethel, in honor of his captor. The other was very large and at first we took him to be a young White Head, but after sufficient examination of both him and other specimens and after several local ornithologists had passed their opinions, we concluded he was a Golden Eagle. His tarsi are feathered, his bill is different in shape and the build of his claws and body is heavier than that of the Bald Eagle and his tail has a very perceptible ring.

But to resume—the first care was to find a suitable place to keep them. At

first we chained them to perches in the barn, but after witnessing several escapes by breaking the chains, we came to the conclusion that it was "no go." After a few days we finished a cage, completely encircling a tree, in which, after severe struggle, we safely enclosed the birds.

Poor Bethel; from the first he drooped and after a week of miserable existence, he was found one morning dead. Upon skinning, we found that he had burst a vein under his wing. He is now mounted and stands guard over a case of smaller birds. The Golden Eagle progressed finely and, before many days were past, we were very glad we had one, not two, live eagles, for the amount of meat the one devoured, was sufficient to engender serious alarm in our minds. This was without foundation however, as after a week or so he seemed to become "filled up" and declined to eat oftener than once in three or four days.

As the nights were naturally somewhat cold, we provided him with an old dog kennel well filled with straw. Into this he retired as evening fell. When approached, he stretches out his neck and utters a loud, cackling cry. When a rat or other small animal is introduced into his cage, he pounces upon it and, taking one end in each of his powerful claws, he tears it apart apparently without effort. The pieces are then swallowed whole.

On warm days he delights in a bath, scattering the water in all directions, ever and anon clucking in a satisfied manner.

The love of liberty is still strong within him. One day a Bald Eagle appeared sailing through the sky. At once, and without hesitation, Jumbo, as

our colored man calls him, dashed against the wire screening with which the cage is covered.

STEWART E. WHITE,  
Kent Co., Mich.

-----  
The Evening Grosbeak.

With an ornithological experience in the vicinity of Detroit covering the last five years, I have met with this species only in the months of March and April, 1889. My first flock was seen on March third. I was in the woods looking up old Hawks' nests, when my attention was directed to a small grove of beech and live oak by having what I at first took to be a number of Bluebirds assembled together and warbling as House Sparrows sometimes do towards evening, but upon a nearer approach, the sounds made resembled the cries of wood frogs and it is doubtless from this close resemblance the birds derived their name. This flock contained at least 200 individuals. They were about evenly distributed in the trees and on the ground, consorting in little assemblies and, while hopping about in search of beech nuts on which the extensively fed, they reminded me of very large, handsomely colored House Sparrows. I penetrated into the middle of the flock, but they continued feeding without displaying the least alarm, in fact appeared almost indifferent to my presence. At times, without any cause for alarm, one would give a sharp chirp and the little party would rise with a loud buzz of wings to the branches overhead where a general wiping of bills and pluming of feathers took place and the spot just left was immediately taken up by another detachment from the trees.

One of the most characteristic features of this species is the large, thick, greenish-yellow bill.

About three-fourths of their entire number were females. The female

differs greatly from the male in color and were it not for the distinguishing beak, might be mistaken for a different species. A male and female before me, taken on above date, measure 8 and 7 $\frac{3}{4}$  inches respectively. The head of the male is blackish-brown, bounded by a broad band of bright yellow across the forehead and a streak of the same color passes over the eye. The nape of the neck and throat are dark yellowish olive, gradually brightening until on the rump, abdomen and lower tail coverts it becomes bright yellow. The female differs by lacking the yellow band on the forehead and streak over the eye, also the large patch of white on the wings. The head is dark brownish and the nape of the neck and back, brownish, shading into greyish yellow on the rump. Throat greyish-brown bordered on either side by a band of black. Breast, yellowish-grey, brown and abdomen and lower tail coverts, white.

This flock was visited every Sunday by several boys with shotguns and rifles and the report of fire-arms could be heard throughout the day. As may be supposed, this weekly persecution thinned their numbers greatly and those that were left, by the middle of April, were exceedingly wild and wary and could be approached within gunshot range only with the greatest caution.

I saw my last specimen April 25th, but in the following month, three adult males were brought me by a friend who claimed to have secured them May 12th.

The last bird of this species, to my knowledge, observed in this locality, was an adult male seen by B. Swales on November 16th, inside the city limits.

Let us hear from others on the habits of this bird.

J. CLAIRE WOOD,  
Detroit, Mich.

### The Solitary Sandpiper.

This bird is very abundant here during the migrations; in fact they are so plentiful that for several years I have known them under the name of "spotted sandpiper." Where the spots came in had always been a mystery to me.

I have had the good fortune to collect three sets of their eggs. As I take skins as well as eggs, there is no mistake in the identification. I had disposed of the eggs under the above erroneous name, when, by an accident, I discovered that my skins, which were labeled Spotted Sandpiper, were those of the Solitary (*Hydrophilus solitarius*.) After discovering my error, I endeavored to get my eggs back, but only succeeded in recovering one, which now rests safely in my cabinet.

The first set discovered was in Scott Co., Minn. I am unable to recall the exact date, but it was about the third week in June, 1887. It was on the shore of a lake whose edges were overhung with willows. The nest was placed on the ground in a small opening surrounded by willows. It was merely a depression in the ground lined with grass. It contained three eggs. They were a grayish color and spotted all over with dark brown. They were quite pointed and averaged 1.35x.92.

The second set was found July 4, 1888 in Sherburne Co., Minn., it was placed about forty feet from the edge of a lake end was concealed in a clump of scattered willow bushes. It was a depression in the ground but contained no lining. There were four eggs in the set. They resembled somewhat the preceding set, but had a more yellowish ground color. They were slightly incubated. The parent fluttered around trying to attract my attention from her treasures. Her anxious manner was what caused me to look for them.

The third and last set was on a small island in the river. One side of this

island is a long, low sandbar covered with willows, bushes and some small, scrubby trees.

On the 26th of June, 1889, I suddenly came upon one of these birds in the above spot. After a short search I found the nest. It contained three eggs which I left. I returned in about a week, but they had hatched and I was unable to find any trace of them.

There is no mistake in my birds now, as they have been fully identified by two prominent ornithologists of this city.

WILL DE LA BARRE.

Minneapolis, Minn.

### The Summer Redbird.

As the Robin is universally acknowledged the forerunner of spring, so should the Summer Redbird be acknowledged as the bird who heralds approaching summer, as it makes its first appearance here from the middle till the last of May.

The Summer Redbird nests twice a year, first in May, second in July. The male is only equalled in brilliancy of plumage by the Cardinal Grosbeak and the Orioles in this vicinity. He is certainly a beautiful bird, his feathers, as the name implies, being of a bright, solid red, unrelieved by any other color.

The plumage of the female is yellowish, dim in color, verging into a darker color on the wings and tail.

The birds may construct their nest either in a tree or in a bush. I have seen them in both places. When placed in a tree, the nest is usually built at the extremity of a long horizontal limb and is, therefore, very difficult to reach, especially if the limb is of a considerable distance from the ground. Climbing irons are of no avail here, for though they might aid you in climbing the tree, they cannot assist you in reaching a nest which is often many feet from the body of the tree.

The nest of the Summer Redbird is composed entirely of dry, yellowish grasses, its lining and outside being of the same material. The nest is a very frail structure, the bottom being so thin that, when the female is off the nest, one can easily see whether it contains eggs or not. I have seen nests so thin that I could count the number of eggs they held by standing beneath and looking up.

The eggs are usually four in number, the ground color being of a greenish-blue, thickly spotted by dark brown spots which sometimes coalesce around the larger end, forming a dark ring. I once found a nest which contained five eggs of uniform size making a very pretty set.

While collecting in a small town about seventeen miles from Lebanon, last June, I found at least twenty old nests of the Summer Redbird which had lain and hatched in May. This bird, though comparatively rare here, was the most plentiful bird in the vicinity of that town. I procured a good many eggs of this bird while staying there.

One curious fact I have noticed concerning the Summer Redbird, they frequently build their nests in the same tree, on the same branch as the preceding year, even though they may have been robbed the previous year. This some may doubt, but probably persons besides myself have noticed it.

E. CARL LITSEY,  
Marion Co., Ky.

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#### The Audubon Ornithological Club.

On Dec. 6, 1889, Mr. Frank Woodruff, of Chicago, reported seeing a Pine Siskin mingling with a flock of Redpolls in the school yard at Normal, Ill.

Mr. C. A. Jones noted two flocks of Bluebirds at Grand Crossing, Feb. 16, 1890.

The Ridgway Ornithological Club, of Chicago, which has been asleep for

about two years, has been reorganized through the efforts of Mr. H. K. Coale, the secretary, and intends to go into active operations once more. The Secretary would like to hear from all old members.

At the last meeting of the Audubon Ornithological Club, Feb. 14, 1890, the following corresponding members were admitted: Dr. S. A. Forbes, Champaign, Ill., and Mr. E. B. Peck, Clifton Springs, N. Y. Several interesting papers were read, among which was one on the *Sayornis sayii* by Mr. A. M. Cox, one on the American Herring Gull by Mr. O. B. Zimmerman and one by Mr. A. R. Hager on the Yellow-headed Blackbird.

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#### Early Arrivals.

NOTES BY WILFRED A. BROTHERTON,  
OBSERVER FOR STATION, ROCHESTER,  
MICH., BUREAU OF ORNITHOLOGY  
AND MAMMALOGY, U. S. DEPARTMENT  
OF AGRICULTURE.

The following birds have appeared in this region remarkably early this year: *Ceryle alcyon* (Linn.), Belted Kingfisher. Was first observed here March 1st. Saw two or three flying over a mill pond, my attention being first attracted to them by their peculiar cry. There was then more ice on the pond than ordinarily for this winter, yet there was some clear water and Paint creek and Clinton river were not frozen except where dammed up.

*Mourula migratoria* (Linn.), American Robin. Was first reported to me as having been seen by some neighbors, Feb. 12th and 13th. Feb. 16th, I saw two. Heard their notes a few times since, during warmer days, we having had our coldest weather since March 1st. Only two weeks of snow here this winter and farmers plowing nearly every month. Ground not frozen until lately.



*Sialia sialis* (Linn.), Bluebird. Heard their gentle warbling as I woke up the morning of March 9th, they having evidently arrived in the night.

#### CHANGES IN THE HABITS OF BIRDS.

*Habia h. h. luciana* (Linn.), Rose-breasted Grosbeak. Once this bird preferred the most secluded retreats in this locality. Now it prefers to come near human habitations. In the summer of 1888 I was called to identify a strange bird that had built its nest in a shaded nook of a vine covered doorway and found it to be a pair of Rose-breasted Grosbeaks that made their home there. They had many a hard battle with numerous European Sparrows, but always came out victorious and succeeded in rearing their young.

A large portion of the ground in the rear of the house was occupied by potatoes. While watching these Grosbeaks the first day I visited the place, I was much interested to see the male Grosbeak pass down one side of a row of potatoes, stripping them of the Colorado potato beetle (*Doryphora 10-lineata*.) Since then, I have often witnessed this habit of these birds.

The nest I referred to was in the heart of this village, one block from Main St. Have often observed them about my own home since then.

The Scarlet Tanager (*Piranga ludoviciana*) viell was more numerous here last year than formerly and ventured to breed just outside of corporation limits and seemed to have lost much of their usual shyness. Their usual cry is very peculiar and rather harsh, yet they sing quite melodiously. It is a bird of wonderful beauty. This bird was the first bird noticed to eat the Colorado potato beetle. It seems strange that our two handsomest birds should delight in such horrid morsels as the larvæ of these beetles, yet I have seen the Rose-breasted Grosbeak devour

them with as much relish as a Robin does a cherry.

That brilliant Gem, the Indigo Bird (*Passerina cyanea*, Linn.), which usually frequents the densest thickets and, like the Scarlet Tanager, has hitherto been exceedingly shy, has been seen several times about my village home.

#### Family Rallidae in Minnesota.

Four varieties of this interesting family have fallen under my notice during the breeding season. Namely: Virginia Rail, Sora, Florida Gallinule and American Coot. These I believe are all of this family which breed here regularly.

The Virginia Rail frequents about the same places as the Sora. Most of the nests which I have taken were placed in a meadow bordering a lake.

The nests are composed of last year's rushes lined with finer grasses etc. They are quite solid structures, but are generally soggy from absorbing the water.

The Rails bend the surrounding grasses over the nest, forming a dome. This is often the means of their exposure. The eggs range from ten to eighteen in number and are a rich buff color spotted with reddish brown. The birds begin to incubate from the first egg.

The Sora prefers to build in more wet places than the Virginia. The nesting habits otherwise are similar.

They utter a peculiar harsh cry during the breeding season. I often wondered what made it until I found out from a more experienced comrade.

The eggs are difficult to describe. They are a grayish-brown spotted with dark reddish-brown. They are from eight to sixteen in number.

I have only found one nest of the Florida Gallinule. I was collecting Yellow-headed Blackbirds' eggs in a

swamp, when I saw the nest. It was fastened to the surrounding rushes and contained seven eggs. I flushed and shot the female close to it. The eggs were creamy brown thickly spotted with brown.

The American Coot breeds here quite extensively. I have often found their nests when looking for those of the Pied-billed Grebe.

The eggs ranging from six to fourteen in number, are laid in a shallow nest of rushes, which are laid lengthwise and across. The eggs are clay color, finely dotted with black.

In spite of what Mr. Davie says in regard to their flesh and about young sportsmen shooting them as game birds, but not hankering after their flesh in riper years etc., I maintain that they are good. I have occasionally run across one while after ducks and when they are cooked I was never able to tell the difference. Perhaps my palate has not been so highly educated as Mr. Davie's, at any rate I never yet have found a person who sports at the Mud Hen who, if questioned, can own up to having tasted of them. They are like a great many other things made to appear worse than they really are.

W. D. L. BARBE,  
Minneapolis, Minn.

#### A Half Day's Egging in Los Angeles Co.

About eight o'clock one morning last season ('89) my cousin and I started on a small collecting hunt to stay half the day. As we were passing by some eucalyptus trees, our attention was attracted to a young Mockingbird not able to fly. We soon captured him and put him inside of a handkerchief. As we were crossing a small stream, we came to a sycamore tree in which my cousin had seen a nest, but it had been torn down since he was there, but by the alarmed movements of the female which was a Black-chinned Humming-

bird (*Trochilus Alexandri*) we knew that there must be a nest in the tree and <sup>so</sup> there *was*, which contained two fresh eggs. After packing them up we tied the horses and investigated a hole in the dead limb of a sycamore tree out of which small straws were protruding. It proved to be a nest of Parkman's Wren. My cousin was knocking against the end to enlarge the hole, when all of it came off and it was well that he had his hand under it or the six fresh eggs it contained would have been broken.

We had the good luck to find another set of two eggs of the Black-chinned Hummingbird. As our time had about expired, we started home well pleased with our success.

M. L. WICKS, JR.,  
Los Angeles, Cal.

#### A Bird Funeral.

Having heard the question a number of times, as to what becomes of the bodies of birds which die a natural death, and never having heard anyone say they had found one, and as I never had in my 6 or 8 years of bird hunting, I thought I would write the OOLOGIST concerning an incident which came under my notice about a year ago.

I was sitting in a swing in an orchard when I noticed a number of Bluebirds which seemed greatly excited about something. On going closer, I found they were burying a Bluebird in a hole, perhaps 4 x 2½ inches and had it nearly covered. When it was taken out, I found it to be full grown and could see no signs of its having been shot.

I do not pretend to say this is what becomes of all birds which die. It is the only time I have ever seen such a funeral.

W. W. MOSHEB,  
Scott Co., Ills.

# THE OÖLOGIST

A MONTHLY MAGAZINE DEVOTED TO  
ORNITHOLOGY AND OOLOGY.

FRANK H. LATTIN, ALBION, N. Y.

EDITOR AND PUBLISHER.

NEIL F. POSSON, MEDINA, N. Y.

ASSOCIATE EDITOR.

Correspondence and items of interest to the student of Birds, their Nests and Eggs, solicited from all.

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Single Subscription, - - - - - 50c per annum.  
Sample Copies, - - - - - 5c each.

The above rates include payment of postage by us.

Send stamp for Premium List.

All subscriptions must begin with either January or July issues.

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\* \* Articles, Items of Interest and queries for publication should be forwarded as early in the month as possible and can be mailed to either the Publisher or the Associate Editor, as you may prefer.

ENTERED AT THE POST OFFICE AT ALBION, N. Y., AS SECOND-CLASS MATTER.

## Jottings.

The Query Column promises to be largely patronized, judging from the number of queries already received. Send them along.

We do not desire to publish articles that have already appeared in some other paper. The OOLOGIST wishes to furnish its readers purely first-hand matter.

Pine Siskins have been abundant throughout the western part of the county, during the entire winter just past.

Look out for nests of the Prairie Horned Lark! It is already getting late for them in New York State.

## Editorial.

*From yr associate editor.*

There was something said in the last OOLOGIST about a "surprise" that would await its readers in the April number.

Well, here it is. The associate editor has no apology to offer for his appearance and nothing to say, except that he has appeared.

He feels at once the importance of his undertaking and realizes the honor he has conferred upon him by being offered the associate editorship of a journal so well-known and widely-circulated as the OOLOGIST.

He only wishes to state that it shall be his highest endeavor to assist in making the little journal more and more interesting each month, and that not only the *April* number, but that *every* number shall prove a genuine "surprise" to all its friends and readers.

## Queries Answered.

Queries to be answered in these columns should be written on a postal or slip of paper—never mix them in your letter when writing about other matters.

H. G. H., Beloit, Col.—Your "White-winged Blackbird," having white spots on the shoulders, and nesting on the ground, laying five blue eggs, and whose song is similar to the Bobolink's; is doubtless the Lark Bunting.

J. P., Kansas City, Mo.—Would like to know if parent birds carry water to their young, or if the young birds do without water. Here is a nut for the readers of the OOLOGIST to help us crack.

W. C. M., Albany, N. Y.—The time of breeding of the Screech Owl in New York is about the same as that of the Crow, that is to say, eggs may be found from about the 15th or 20th of April along into the fore part of May.

B. H. B., Cedar Rapids, Ia. and others.—It is almost impossible, except in some striking instances, to identify nest and eggs without some description of the bird.

G. H. G., Baltimore, Md.—The nest and eggs you describe are those of the Indigo Bunting. The female Indigo Bird is of a general brownish color throughout.

F. C. S., Baltimore, Md.—Your nest found in a cavity of an oak containing five eggs spotted with pinkish is undoubtedly that of the White-breasted Nuthatch.

F. H. D., Fayville, Mass.—Can hardly identify your nests from descriptions. Think No. 1, is English Sparrow. Would not be surprised to hear of this bird nesting anywhere.

A. W. H., San Jose, Cal.—The bird called "Linnet" in your locality, and described by you is probably the House Finch (Ridgw. No. 170.)

F. C. H., Whitby, Ont.—The "*Auk*" is published quarterly in New York City and is the organ of the A. O. U. The subscription price is \$3 per annum, sample copies 75 cents.

The "*Ornithologist and Oologist*" is published monthly at Boston at \$1 per year.

We will take subscriptions for either.

H. G. P., Cazenovia, N. Y.—The Woodpeckers frequently excavate in trees in winter for the purpose of providing places of shelter for themselves.

#### Stray Feathers.

Mr. Geo. H. Gray, of Baltimore, gives an account of several queer nesting occurrences, the most interesting of which is in regard to a Chipping Sparrow which built its nest in a pear tree when the fruit was young. As the fruit grew, one of the pears protruded itself into the nest and broke the eggs into bits. He also writes of a House Wren which built its nest in the nest of a Barn Swallow.

Mr. V. N. Marsh, of Mt. Union, O., relates a novel incident in connection with a Woodcock. He writes:—"About seven o'clock the other evening, a Woodcock flew into town and flew straight against the electric light in the square, and was instantly killed. I never before knew of a Woodcock coming into a town."

We feel a smile coming unconsciously over our features as we read the inquiry of one of our correspondents, wishing information concerning the "habits and plumage of the 'Gopher'." For his enlightenment we would say that the "Gopher" (whose eggs are listed in our catalogues) is a turtle of the Southern States.

Another simple contrivance for securing eggs from excavations in trees without tearing away the nest is brought out by J. W. Mykrantz of Paola, Kansas, who writes:—"A friend of mine obtained a fine set of eggs of the Screech Owl from a difficult nest without destroying the hole by taking a small hickory stick and bending it to fit the hole. Around one end of the stick he tied a ball of cloth, over which was a thick coating of liquid glue; and he drew the eggs out safely."

A. B. Grindell, of Plattsville, Wisconsin, writes that there have been a great many Snowy Owls shipped into that place this season for sale.

J. H. Fisher, Jr., of Baltimore, Md., reports having taken last season a nest of the Rough-winged Swallow containing four eggs, from a ledge underneath an iron railroad bridge almost over the middle of the stream and a few feet from the water, a rather unusual place for the nest.

Under date of February 27th, Mr. F. Jones, of Martin's Ferry, O., writes us that Robins and Bluebirds are building.

and that he saw a young English Sparrow just out of the nest. An early season is apparent.

Merritt Holmes, of New York City, writes us that he took, last season, in Kansas a set of two eggs of the Poor Will or Nuttall's Whip-poor-will.

There are worse finds than a set of Mallard Eggs. William Turner reports a set of four taken near St. Paul, Minn., last season.

James A. Wood, of Rouse's Point, N. Y., would like to have someone inform him as to how to make a cabinet for eggs and curios.

A. L., of Manitowoc Co., Wis., writes:—"In the latter part of June, 1889, I found a set of three eggs which are, as far as I have been enabled to identify them, those of the Nighthawk. They were deposited on the bare ground in the midst of a large tract of sandy soil lying close to the lake shore. They so closely resembled the surrounding stones and rubbish, that it was through mere chance that I discovered them. No attempt at a nest had been made and the parent birds were nowhere to be seen. I carried them home and placed them in my cabinet, hoping to identify them at some future time. But all sets of eggs of the Nighthawk which I have seen, differ in two respects, that of consisting of only two eggs to a set, and of being more glossy and smooth than mine. Will some reader of the OOLOGIST please inform me what species this is, or whether it is only an exceptional set of the Nighthawk?"

Ernest E. Lee, Covington, Ga., reports an early nest of the Cooper's Hawk. He found a nest containing young birds on March 8th.

Allison Merritt, Washington, D. C.,

reports an exceptional set of Flicker's Eggs. The set, which was of nine eggs, contained two small eggs which measured only about  $\frac{1}{2}$  by  $\frac{3}{4}$  in. One of the small eggs was found on the ground at the foot of the tree.

Frank Harris, of La Creseent, Minn., reports the following large and early sets:—

Feb. 17. Great Horned Owl. Set of four incubated eggs.

March 13. Great Horned Owl. Set of three incubated eggs.

March 13. Barred Owl. Set of four eggs. Incubation advanced.

First Bluebird of the season was seen March 12th.

#### Winter Notes from St. Thomas.

On the 19th of March, Mr. O. Foster of this city, shot two White-winged Crossbills on our grounds, both males. These are the first that have been recorded in our county.

Bird life has been quite abundant in and around St. Thomas, the past winter. Juncos, Redpolls, Tree Sparrows, Snow Flakes, Woodpeckers of several species and Crows were the most common birds noticed.

On the 13th of December, 1887, I shot a male Hermit Thrush. I consider it quite uncommon to find a bird like this one so late in the fall.

Early in January, Mr. B. P. Wintemute of this city, shot several Snow Flakes and one was only injured on the wing, which soon healed up and now it appears to be contented with its new home. It eats any kind of seed given it and its owner has good faith that it will remain in good health and spend its summer here when he might gain some knowledge of it, in the breeding season.

F. H. FARLEY,  
St. Thomas, Ont.

Solomon says Evening Grosbeaks fly Eastward And They Fly.

The past winter will be remembered for some time by ornithologists of the Eastern States as one in which the Evening Grosbeak flew well beyond its bounds and made itself known in the East.

This bird is a bird of Western North America, being most common between the Rocky Mountains and the Pacific Coast: It moves irregularly eastward in winter to Michigan, Wisconsin and Illinois, but this past winter reports of its being taken in many parts of New England and the East are common.

Following are a few instances sent us:—

The Evening Grosbeak has been common about here this winter. They seem to have been driven east by the strong gales we have had lately.

In the early part of the winter I came across a flock of about 30, picking the seeds out of decayed apples still on the trees. Would like to know whether any Evening Grosbeaks have been observed in unusual parts in the East.

G. LESLIE,

Hamilton, Ont., Can.

On the 22nd of January my brother shot two Evening Grosbeaks on our grounds, a male and a female both in very fine plumage, and on the 28th of February I shot another, a female within a few feet of where the others were shot. Their stomachs all contained the kernel of the seed of the wild cherry. Four others were taken and several more seen in February in the city

F. H. FARLEY,

St. Thomas, Ont.

"I have received a fine pair of Evening Grosbeaks—the first I have ever seen in Vermont.

S. O. BRUSH,  
Chittenden Co., Vt.

On Feb. 11, 1890, while in Jordan, N. Y., a bird lighted in a tree nearly over my head, which on second glance proved to be a female Evening Grosbeak (*Coccothraustes vespertina*). Luck was against me though, for before I could get a shotgun the bus with bells on the horses went lumbering along and my bird (so the boy said that was watching her) flew toward the "Other Side of Jordan" and in a three-hour's search, I failed to find her; but as there are lots of large Spruce trees in the village she might easily have escaped my observation. I have skins in my cabinet of (male and female) of this species and am positive as to the identity.

E. G. TABOR,

Cayuga Co., N. Y.

#### Cowbird Sitting on Eggs.

In reply to R. C. Alexander's query in March OOLOGIST, I will relate an incident in the life of a "Parasite," as the Cowbird is often called.

One bright, warm and summer day of 1889, I had taken my collecting box and gun (for it was unsafe to go into the thicket to which I was bound, without a gun on account of the large population of that dread to every body—*Mephitis mephitis*) and had proceeded about half way through this dense 20-acre thicket, when my attention was attracted by the cries of some small bird. I proceeded very slowly and carefully, determined to find out the cause of this uproar. I had not proceeded very far, when, as I approached a clump of blackberry vines, I saw some small bird dart away in the woods.

Searching through this clump of vines I saw a Cowbird sitting upon on a nest in a small bush. Here, then was the solution as to what undoubtedly caused the uproar, for it was probably the nest of this small bird upon which the Cowbird was sitting. The Cowbird flew off as soon as I approached the nest. It

contained four eggs of some species of Warbler, but I can not say what kind, as the bird disappeared before I had a chance to shoot it.

During all my years of collecting I have seen but this one Cowbird upon a nest. I am *positive* that it was a Cowbird.

If anyone else has had similar experiences, I join with Mr. Alexander and would be pleased to have them related in the columns of the OOLOGIST.

W. E. SNYDER,  
Dodge Co., Wis.

Seeing Mr. R. C. Alexander's query in respect to the Cowbird, I thought I would relate a little experience with it which may be of interest to him.

On May 20, 1889, I found a nest of the Chipping Sparrow, completed but containing no eggs, as yet. On the 23rd, I had occasion to pass that way and was attracted by the bird which seemed to be in distress. Remembering the nest previously found, I thought I would take a look into it; so stepping up, I parted the bush in which it was situated and saw a Cowbird sitting upon it. She eyed me an instant and then was off.

The nest and its two eggs was afterwards deserted by the parent birds although no Cowbirds' eggs were laid therein.

W. CONGER MORGAN,  
Albany, N. Y.

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#### The Downy Woodpecker.

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Although this bird is rather common in my locality, I have only had the opportunity of collecting one set of eggs. A *Dryobates pubescens* commenced, last season (1889), the excavation of its nesting hole in a dead limb of a cherry tree, near the house in

which I was staying. During the excavation of the future receptacle of eggs, I had ample opportunity of studying the habits of this progeny of the red-headed family.

It would drum, drum, drum for hours at a time, with unceasing energy, and continue with its work without a moment's intermission. It would sometimes be so occupied with the work in hand that I could approach clear under the hole, and then I have had to jar the tree before it would become alarmed. In all my observations of this bird I have found it to be very companionable and social in its character; enjoying the society of other birds and not fearing the presence of man. Out of nesting time it can be found continually clinging to the trunk or branches of trees searching for larvae. It also destroys a large number of insects.

The bird in question would, again, absent himself for a considerable period, until sometimes I would grow alarmed, unless my somewhat frequent interruptions of the good work going on, had frightened it away from the nest. But it would return after its holiday with renewed energy and go to work with more vim and vigor than before.

After work of excavation had ceased I waited the required time and on May 23d I concluded it time for the set to be completed and to take the eggs. I cut away the bark from around the hole and found it to contain five glossy, white eggs, laid on the bare bottom of the hole. When I blew them I found the incubation to be from fresh to advanced.

Let us hear from other collectors, on the habits of the Downy Woodpecker.

A. C. LILLARD,  
Marion Co., Ky.

### Hardly Ornithological.

#### A FOSSIL SNAKE AND A ROCK-ENCLOSED TOAD.

In 1876, some of our workmen while digging limestone in our quarry, brought to light a large petrified snake, about four feet in length, all coiled up, which had the appearance of being spotted like a rattler; it came loose from the upper stone all except the head which adhered so firmly to the stone that it broke all to pieces when father tried to chisel it out. We afterward found another more imperfect snake and several petrified fresh water clams only one of which is perfectly shaped. The snakes were given away before I knew the value of such specimens. In vain have I searched for a petrified bird's nest.

But the queerist of all is this. About 12 years ago father and one of his men were quarrying stone in the same quarry when they removed a large stone from off another and discovered an extra large toad lying in a slight hollow in the lower stone. They laid it in the sun a short time when, to their astonishment, it hopped off quite lively. They examined the stones to see how it had come there but could find no visible crack or opening by which it had entered—nothing but the two hollows where it lay between two layers of solid limestone each a foot thick by ten square, which lay closely adhering to each other. The question is how did he come there, had he lain for perhaps Centuries in a torpor between two layers of solid rock? This is a true statement although it may seem impossible. I will close by asking pardon for writing about snakes, clams and toads, instead of birds.

GEO. W. VOSBURG,  
Columbia Co., Wis.

#### More "White Blackbirds."

From W. E. Snyder, Beaver Dam, Wis.—In reply to Mr. A. Drouet's

query in last OOLOGIST, I will say that an Albino Blackbird stayed with a large flock for an entire summer, in the neighborhood of my former home in Southern Illinois. This flock was of about 300 birds. I would say that Albinos of the Blackbirds are very rare, here at least.

From George Vosburg, Columbus, Wis.—I noticed Mr. Drouet's query in the March OOLOGIST "Are White Blackbirds Common"? They are not that I know of, but I have heard of one other than the one he spoke of. It was captured, or rather taken from the nest, by one of my consins, in Minnesota (Olmstead Co.) over 12 years ago. I don't remember the species, but I think it was the same kind he speaks of.

#### Queer Nidification.

Thinking perhaps it might be of interest to some of the readers of the OOLOGIST, I will give a note which I made on May 17, 1889. While in company with my father on a trip through the woods in South Duxburg, Mass., we flushed two crows from a pine tree. On ascending I found a nest of the common size and structure, containing four young birds just hatched and four eggs. In blowing the eggs, I found one about to hatch, one dead and two poor ones. I also took two sets of robin's eggs which I think may also be of note. The first set contained two eggs. She left them and built a second nest in which was laid four eggs. She then built a third nest in which was laid and raised three young. The nests were placed in the orchard where I had good opportunities to watch their progress.

I would like to ask if it is a very common occurrence with the crow; also if the third party to the nest is a female. Hoping to receive an answer through the columns of the OOLOGIST.

E. S. GLOVER,  
Plymouth Co., Mass.



## IMPORTANT.

collectors having eggs of Bridled Tern that they obtained direct from me, will please keep the same in their possession until a question which has recently arisen, can be settled.

My collector on the Bahamas was a man of experience, an old army captain, and who, for the past dozen years, has spent from six to nine months annually in active field work. In '88 and '89 he brought home from the Bahamas several skins of the Bridled Tern and a few eggs which he positively identified as coming from the same species. That my collector is honest in his belief in the identity of the eggs, is unquestionable, but one of the best, if not the very best Oologists in the United States—or the world for that matter—writes me that they are not the eggs of the Bridled Tern.

My collector is now in Central America somewhere and this matter cannot be straightened until his return which is not expected until July.

While I shall refuse to fill orders for eggs of this species until his return, I shall also refuse to redeem any of the eggs that I have sold for that species during the past eighteen months until the matter can be straightened. Should it be decided that the eggs are genuine, or should it be decided otherwise, notice will be given in the Oologist and I shall straighten the matter to my patrons' entire satisfaction.

In conclusion, I would state that in which ever way it may be decided, that the true eggs of the Bridled Tern are like, that the description of them as given in Davie's "Key to the Nests and Eggs of North American Birds," is wrong.

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Monthly. 50c. per Year.

Vol. VII,

ALBION, N. Y., MAY, 1890.

No. 5

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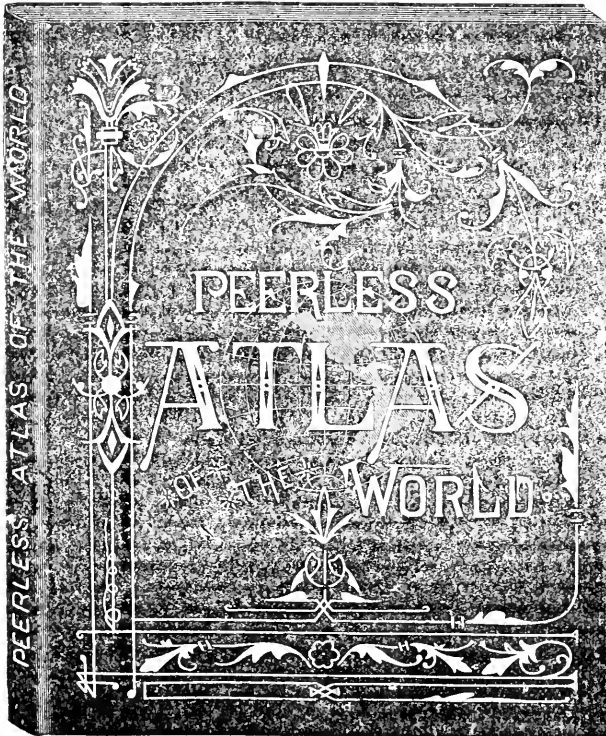
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# THE OOLOGIST.

VOL. VII.

ALBION N. Y., MAY, 1890.

No. 5

## Do Birds Mate more than Once?

Mr. George L. Stevens, in the January OOLOGIST, in closing his interesting article on the "Capture of a Trumpeter Swan," brings up an important question, and one which I think all ornithologists may profitably consider, namely—the mating of birds.

He states, in concluding his article, that he has read that the Trumpeter Swan never mates but once.

Now I would like to hear the opinions of our more advanced ornithologists on this subject of mating.

For some time I have been a devout believer in the theory of permanent mating, and I think that there is much and weighty evidence going to show that nearly all birds choose their mates but once, and then for life.

It shall be the purpose of this article to set forth some of this evidence and then to invite the attention of all interested, to this interesting subject as they find it in their own fields and woods, and I believe that close observation cannot do otherwise than prove the truth of the theory of permanent mating.

In the first place, I believe we are laboring under a misconception and are too willing to take for granted things that have not been proven; and so let me ask what is it that has led us to think that birds mate anew each year?

If we will candidly ask ourselves what it is that has convinced us and what evidence we have as proof of yearly mating, I trust that we will find that we have come to believe it without any particular proof or evidence. More than this, proof and evidence support just the opposite idea.

Some may say that the many mating antics which we notice every spring between male and female birds are

good proofs of annual mating. But let us look into the matter. Did we ever actually see old birds up to these mating tricks?

I venture to say that these mating frolics are carried on almost entirely by the young "unmarried" birds of the previous year, and that the old birds return to their old nesting sites without any such manoeuvres.

C. C. Abbott says in his excellent work "Waste-Land Wanderings," a worthy consideration is the remarkably prompt appearance of migratory birds at their former nesting sites. Not merely in the same neighborhood, but near the same tree, bush, or hollow in the ground; and a marked disposition to remain there, and particularly to roost there until nesting begins.

"This is especially true of the Baltimore Oriole, which I have often found at dawn on the day of his arrival, examining the remains of last year's nest, and have seen him commence repairs that same day when the structure permitted it. His mate is usually but a few hours later, contrary statements notwithstanding; and the arrival of Madam Oriole was not celebrated by any billing and cooing. They were plainly 'old married folks' before they came." "Of course, in the lives of young birds, there comes a time when the mingled joys and sorrows of courtship must be undergone, and curious scenes are yearly to be witnessed. These frantic efforts to secure the smiles of some fair one have been elaborately detailed by many ornithologists, and it has been inferred that the same ordeal must yearly be repeated; but in very many more instances than has been supposed, I believe the very opposite of this to be true."

With the birds with which we are most familiar, we become acquainted individually. We come to know not only robins as robins, and wrens as wrens, but we recognize individuals among them—those that have characteristics peculiar to themselves.

For four successive years a pair of robins nested in the lattice work of my

porch, each spring coming back to the same place and adding to, and building upon their former nest. I became intimately acquainted with these two birds and know they were the same ones each year. Now, if these robins remained continually mated for four years, why not for life; and if robins, then why not other birds?

Again, it is a highly significant fact that our winter visitants from the North (those that are non-gregarious) almost always appear in pairs. As examples of this, we have the Northern Shrike and Snowy Owl, which, in this locality at least, almost always appear in pairs; and when we remember this fact, as well as the fact that a pair of Flickers have not infrequently been known to jointly excavate, in midwinter, cavities for roosting places, the question at least asserts itself—if mated only for a season, then why these mutual interests in midwinter?

Finally, let us have a few observations from Abbott, which can be explained only on grounds of permanent mating. He says:

"A pair of Cardinal Grosbeaks were found nesting, June, 1883, and the female was readily distinguished by a peculiarity in the coloring of her wings. The pair remained in the locality during the succeeding winter, nested in the old site in 1884, and in 1885 chose a new position in a thicket of smilax a few yards distant. This pair of redbirds were always associated during the two winters that I had them under observation."

"Meadow-larks, if not in loose flocks, as though two or three broods were united, are always in pairs, and there is every appearance of their close companionship during the winter. I have hundreds of references, in my notebooks, to single pairs frequenting certain fields the year through."

"The familiar little Sparrow-hawk finally offers a striking instance of permanent bird marriage. A pair of these pretty falcons have for five years nested near the residence of my neighbor, and when the labor of rearing their young was ended, they retired to the shelter afforded by the projecting eaves of my

neighbor's house and there remained until the following spring. These birds were quite as affectionate and mutually considerate in winter, as when they had the common interest of offspring to keep them together."

Now one objection may arise. If birds are permanently mated, why do they not migrate together and why do not males and females arrive simultaneously in the spring?

This is perhaps the most serious objection, but we have only to watch carefully these self-same migrants to become more and more convinced of their life-partnership. It is, indeed, hard to realize that many of these birds should remain together for so long a time, when but a small part of each year is spent in the rearing of the brood. It is quite possible that they do not retire to other portions of our country in company; but it does appear that they part with a mutual understanding to meet again when separations do take place. It is not simply the same male bird or the same female that reappears spring after spring, but the same pair of birds.

Of course, every good rule has its exceptions; and I would make the exceptions to the rule of permanent mating, certain polygamous and polyandrous birds as the English Sparrow and some others; and certain game birds which are subject to great persecution, and where the chances are against both parents surviving until the following breeding season.

And now in conclusion let me ask the question which I hinted at the beginning. What proofs have we for believing, or what reasons for thinking that birds mate yearly or more than once?

NEIL F. POSSON.

#### A Cunning Blue Jay.

Not many years ago, while I was stopping in a small Kansas town, I had occasion to witness a very laughable



duel between a cat and a Blue Jay. The Blue Jay was sitting on a fence, and to all appearances, having a most enjoyable time, when the cat appeared on the scene. It evidently was hungry, for it began to make preparations to capture the bird.

First it began by crouching down for an instant, then it would spring forward a foot or so, in a most noiseless manner. It kept this up until it was within a few feet of the fence, when it crouched low, then sprang for the bird; but Mr. Blue Jay did not intend to be caught that way. He saw the cat just as she sprang and quickly took himself away to a barn near by, and before the cat could jump from the fence, he pounced down upon it with great swiftness and gave the cat a stunning blow upon its head with his bill. The Blue Jay then flew away in triumph. I never will forget the look on that face.

JOHN PERRY,  
Kansas City, Mo.

#### Habits of the Evening Grosbeak.

This strange bird was very aptly named. Its many shades of yellow varying from the brightest to the dull-est, the flashes of white on his wings, and the sombre hue of his head and wings all serve to suggest the gorgeous sunset and the following twilight.

In a recent number of the OOLOGIST, I gave a short account of a flock I discovered. In this flock, it will be remembered, the males and females fed in separate bands. Although I have taken observations on many other flocks since that time, I have failed to find, except in a single instance, this sharp division of the sexes.

The Evening Grosbeak may be found in "openings" of deciduous woods, maple preferred on account of the mast it produces. The chances are that their sharp senses would make them

aware of your presence long before you had a suspicion that the birds were about were it not for the loud metallic call of the males; this is rarely uttered while feeding, but by standing still a little while it may be heard. When the flock discovers you they will fly into the trees directly above their feeding place uttering a *cheping* note and, after settling on the branches the males give a perfect chorus of alarm whistles so loud and frequent that you think the flock numbers three times as many as it actually does. Before long, if you have restrained your desire of collecting, an old male flies towards you and, alighting near by, looks inquisitively into your face and, as if dissatisfied with the result of his observations, he utters a loud whistle, upon which, the whole flock joins him. While assuring themselves as to your identity, they utter a faint soliloquizing note like the distant chirping of a flock of English Sparrows. If, during this you remain perfectly still, moving not in the least, they become reassured and again address themselves to their food. One by one they sail to the ground on outspread wings, little by little the alarm notes of the males become fainter and fainter, and at last cease altogether, and before long quiet again reigns in the Grosbeak family. Their carriage and the wise manner with which they scan the ground reminds you of a flock of Robins, and, half closing your eyes, you amuse yourself by imagining that spring is already here, when your thoughts are suddenly recalled by the hasty alarm note of that inquisitive old female whose bright eyes have detected some slight movement on your part and who thus communicates her discovery to the flock. Instantly, with a rush of wings, they rise to the trees turning their heads curiously from side to side to find the cause of alarm. While the wise heads are thus engaged, the younger members improve their time

by nipping the young birds and branches, assuming, while occupied in this precarious business, a variety of posture that astonishes and delights you. By this time your patience is exhausted and, selecting the old patriarch of the flock, that one in the middle with the jet-black wings and tail, you discharge both barrels of your gun into the band. With a startled cry they dash from the tree, steering in and out among the trunks with a dexterity and swiftness that a Ruffed Grouse might envy; rising high in the air in a compact flock, circling around a few times, as if loth to leave a place so replete with good things, then darting away to less attractive, but safer woods.

Turning your attention to the fallen you first set about catching yonder wing-tipped female and, attempting to grasp her under the wings, get so well bitten for your pains that you are glad to let go if she will. Presenting a stick you find that she can be easily transported from place to place by the grasp of her powerful bill alone.

Besides the maple mast and buds the Grosbeaks are very fond of cedar berries, and the red haws that grow in the woods.

As spring advances the males may be heard uttering their quaint song at all hours of the day. I am inclined to think that instead of vying with the Barred Owl in vesper song, the Grosbeaks, like other sensible birds, retire to their evergreen roosting place as evening approaches.

This Grosbeak comes over year but is so irregular in his comings and goings that it is very difficult to decide whether it is a winter resident, visitant, or only a migrant. My opinion is that although they undoubtedly remain in small bands during the winter, yet the bulk passes north in the months of March and April. In those months a flock can nearly always be found by search in suitable localities.

STEWART E. WHITE,  
Kent county, Mich.

### Evening Grosbeaks Again.

In addition to the instances cited last month of the Evening Grosbeak occurring in the Eastern States, we also have the following:

A few days ago a party of hunters shot two fine specimens of the Evening Grosbeak, in this vicinity. This is quite unusual as the bird is not often seen so far east. The birds were identified by the State Ornithologist,

M. L. F.,  
Williamsport, Pa.

On the morning of March 18, 1890, while waiting for one of my friends with whom I was going gunning, I heard a slight noise in a maple tree standing near and, on looking up, saw two birds which I did not recognize. I fired once and missed, upon which they flew to the top of a large elm tree in one of the neighbor's yards. After waiting a few minutes they flew down into a group of spruce and cedar trees. Here I crept up and secured one which proved to be a female. The other flew off so that I could not obtain it. Sex of the bird that escaped not known. Contents of stomach, parts of cedar buds. The bird has been identified by Professor Carl Braun.

GEORGE P. SHEPHERD,  
Bangor, Me.

### The Pileated Woodpecker in Florida.

This handsome Woodpecker can hardly be classed among the rare birds, but is becoming rarer as civilization advances. Years ago it was said to have been common, but as the hummocks and swamps have been cleared up, he has retreated farther and farther, until now he is found only in the more secluded hummocks. In these places he may be found at all seasons, busily engaged in pecking out grubs from the many rotten logs and stumps to be

found in these resorts. Like the Flicker, he will alight on the ground, if by so doing, he can more easily peck out his grub.

The breeding season commences in the latter part of March or first of April and only one brood is raised.

The nest is placed in some high dead snag or tree.

I have taken but one set of eggs of this bird and these I found by accident more than anything else. While hunting bird skins, I noticed a large hole way up in the top of a dead pine snag, but paid but little attention to it, as it seemed to be an old hole. When, in looking for a small warbler, I passed near the root of the snag, and noticed that the ground was fairly covered with bits of rotten wood and bark. Looking up, I found the hole to be a new one, a fact I had failed to detect before. At this, I found a club and began to pound on the tree. For a while nothing appeared, but presently out came the head and neck of a female Pileated, as if to inquire what all the disturbance was about. My delight at this was without bounds, but was somewhat checked by the thought that I had no climbing irons with me, they being in my room at the college, which was good two miles distant. A walk of four miles was not very pleasant to think of, but I could not think of leaving the nest without investigating it, so I put off for the college.

For brevity, I will say that after a lapse of two hours, I was again back to the nest. After a short rest, I strapped on my climbers and securing my hatchet, as I fully expected to have to cut some, as I thought these birds made their nests very deep. Imagine my surprise then, when, after climbing up to the hole, I thrust in my hand and found the hole to be only seven or eight inches deep and in the centre I felt three fine large eggs snugly cushioned on a soft

bed of chips, a safe receptacle for them during my descent.

On examining the hole, I found the entrance to be nearly five inches in diameter and to extend in about as far before turning down. The excavation was very shallow, only seven or eight inches, but very large and roomy. The bottom was covered with soft bits of rotten wood, making a soft bed for the eggs.

I was getting rather tired of hanging on by this time, so made my descent without mishap. I next set about to get the birds, which, by a small degree of caution, I accomplished; rather cruel, to be sure, but I wanted them for the college museum.

After carefully packing up my birds and eggs, I started for the college, as it was about time for dinner and I was certainly hungry enough to eat with a relish.

Dissection showed the female's stomach to be empty, while the male was fairly gorged. I suppose he had been to breakfast and would have soon relieved his better half while she filled up.

On blowing the eggs, I found the embryo to have just begun to form. They were pearly white, very slick and glossy and were, to my notion, the finest eggs I have ever taken.

A. L. QUAINANCE,  
Lake City, Fla.

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#### Bird Protection.

I have come to the conclusion and I am sure many others also have, that there are too many egg and bird collectors in the field.

I do not mean this to refer to anyone who really takes an interest in birds and desires to study them and their habits, but the class of "collectors" who go about pilfering nests and killing birds indiscriminately. Their manner of collecting is precisely like

that of an old woman gathering up her hens' eggs or killing a few chickens for market. She is just as much of an ornithologist or oologist as they are. In fact their object in view is clearly mercenary.

This manner of collecting should be stopped; and anyone who will stand by and see our native birds being rapidly exterminated should be ashamed of himself.

Two other things to be done away with are "pot-hunters" and "plume hunters." Take for instance the Wild Turkey, it is surely following the fate of the Great Auk. As to the doings of the "plume hunters" I can not do better than to refer you to Dr. F. W. Langton's "Destruction of our Native Birds," in OOLOGIST, vol. 5, No. 4.

There is a fourth enemy to our poor birds; this last is the English Sparrow (*Pugnacius trampus*) and the destruction caused by these pests everyone knows.

I think the way these evils could be remedied would be this: In the first place laws should be made forbidding the collecting of eggs except for strictly scientific purposes. These laws should be very stringent. The next two evils could be gotten over by strengthening the game laws.

The last is only to be put down by uniting and striving "with tooth and nail" to drive out that little pest, the English Sparrow.

Now we should not let these matters stand, they have already stood far too long and I make an appeal to every true ornithologist and oologist to help remedy these great evils.

Could a society not be formed to more quickly obtain these objects?

I would like to see an article in the OOLOGIST written by a more experienced hand than mine. I hope that the ornithologists and oologists of America will remember that collecting is but a

secondary consideration and that study is the first.

G. M. LESLIE,  
Hamilton, Ont.

#### The Chinese or Mongolian Pheasant in Idaho.

A few years ago several pairs of this gay-plumaged bird were imported from their native home in China, and turned loose in Oregon, the State Legislature giving them the protection of the game laws of that State. Since that time these birds have increased rapidly. A pair of old birds will in one season hatch and bring up sometimes as many as three broods of young, each brood ranging from 12 to 25 young birds.

During the spring and summer months their shrill cry, very much resembling their domestic cousin's voice, may be heard in the meadows and wheat fields. In the winter they betake themselves to the low ground around small lakes and along grassy river bottoms. I have often while hunting ducks, scared them up among bands of snipe and wild ducks.

The male of these birds is beautiful. The breast is a brilliant red-brown. The back and wings are of a bright straw color mingled with green and bronze. The neck is bright green with a bronze tinge and a ring of pure white feathers encircles the neck. The head is surmounted with two tufts of feathers, resembling horns, and the tail which is composed of several long feathers, is of dark olive color. The female is of a duller color, being dark olive-purple striped with lighter gray bands. The meat of these birds is very white and delicious; fully equalling that of the Sabine Grouse (*Bonasa sabinii*), or the Dusky Grouse (*Tetrao obscurus*).

CLAY MCNAMEE,  
Moscow, Idaho.

# THE OÖLOGIST

A MONTHLY MAGAZINE DEVOTED TO  
ORNITHOLOGY AND OÖLOGY.

FRANK H. LATTIN, ALBION, N. Y.

EDITOR AND PUBLISHER.

NEIL F. POSSON, MEDINA, N. Y.

ASSOCIATE EDITOR.

Correspondence and items of interest to the student of Birds, their Nests and Eggs, solicited from all.

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Single Subscription, - - - - - 50c per annum.  
Sample Copies, - - - - - 5c each.

The above rates include payment of postage by us.

Send stamp for Premium List.

All subscriptions must begin with either January or July issues.

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ALBION, Orleans Co., N. Y.

\* \* Articles, Items of Interest and Queries for publication should be forwarded as early in the month as possible and can be mailed to either the Publisher or the Associate Editor, as you may prefer.

ENTERED AT THE POST OFFICE AT ALBION, N. Y., AS SECOND-CLASS MATTER.

## Jottings.

"I hear from many a little throat

A warble, interrupted long;

I hear the Robin's flute-like note,

The Bluebird's slenderer song."

"Brown meadows and the russet hill,

Not yet the haunt of grazing herds,

And thickets by the glimmering rill,

Are all alive with birds."

We are in receipt of a fine portrait drawing in natural colors of the Cooper's Hawk from the hand of Robinson Watters, Baltimore, Md. The drawing speaks well for Mr. Watters as well as for *Accipiter cooperi* himself.

We learn from Prof. B. W. Everman, Terre Haute, Ind., that the ornithologists of the Mississippi Valley are arranging to have a meeting of American Ornithologists at the meeting of the American Association for the Advancement of Science at Indianapolis next August. He assures us that enough replies have already been received to insure a profitable meeting. Surely the advantage of such a meeting where ornithologists can get together and become acquainted, is great, aside from the profit and benefit that will be derived from the papers and discussions given. All, who possibly can, should embrace this opportunity.

Our contributors should not become discouraged if their articles do not appear at once and sometimes not at all. If they could see the piles of manuscript that comes before us monthly, from which we are to select a few of the most interesting articles and such as are of the most value to the greatest number, they would think it nothing strange that their articles are sometimes overlooked. Remember we want articles on the rarer birds and on novel and unusual occurrences, and then—"If at first you don't succeed, try, try again." We mean to treat all fairly.

We have on hand several county lists of birds which have been sent us, and we only regret that want of space prevents us from publishing. Such lists, while they are of great local value, are not of general interest to readers all over the country, and so we are obliged to omit them.

## Our Question Box.

Queries to be answered in these columns should be written on a postal or slip of paper—never mix them in your letter when writing about other matters.

H. A. H., Edinburg, Ind.—It is a common occurrence for the Crow to assail Hawks and Owls. It seems to be the Crow's delight to torment these larger birds.

J. P., Kansas City, Mo.—In reply to your query in last number we have received light from some of our readers. J. H. Fisher, Jr., Baltimore, Md., writes that he thinks birds give their young, water in some way. He says he has tried to raise some young crows without water and they all died and again he raised some by giving them water. Charles L. Weeks, New York City, thinks that the birds moisten the food given to their young and thus supply their thirst. Claude Bell, of York, Neb., is of the opinion that the parent birds carry water in their bills and with this idea agrees the testimony of E. K. C., who writes: "I have seen Canary Birds water their young. They would go to the water and fill their bills, and give it to their young the same way they feed them. I think other birds do the same."

H. H. R., Middle Granville, N. Y.—The name "Hen Hawk" is applied to nearly all the larger Hawks. The "Hen Hawk" of your locality is probably either the Red-tailed or Red-shouldered. The "Whitepoke" is doubtless the American Bittern.

B. S. B., Rochester, N. Y.—There is a stringent State Law restricting the taking of birds and eggs, but as it is rarely enforced we hardly think it will interfere with anyone who is collecting from a purely scientific stand-point.

J. H. H., Hammondsport, N. Y.—Persecution has made the Passenger Pigeon and Raven rare in almost all parts. As to the other birds you mention, think a careful search will reveal them.

R. S., Kansas City, Mo.—Your yellowish eggs spotted with chocolate markings and pencilings and found in a hole in an apple tree, are doubtless the eggs of the Crested Flycatcher.

C. T. D., Raciney, Wis. and many others.—It is impossible many times to identify with certainty, either birds or eggs without having the specimen before us.

P. E. R., Sewickley, Pa.—As to how to make bird lime, we would refer you to an article in the *Young Oologist* of

August, 1884—page 59. Or you can obtain bird lime already prepared, from almost any natural history dealer.

J. V. C., Marathon, Ia.—In reply to your query concerning the general colors of the Solitary Sandpiper, we quote from Maynard's *Birds of Eastern N. A.*: "Adult. Above, dark-brown, streaked on head and neck, spotted on back, and widely banded on tail, with white. Beneath, white, streaked on neck and breast, and banded on sides, under wing coverts, abdomen, and under tail coverts, with dark-brown."

W. I. C., Norwalk, Conn.—The nests and eggs of the larger hawks are so similar in description, that it is impossible to identify yours from description given. Isn't it the Red-tailed or Red-Shouldered?

J. P. J., Kelton, Pa.—The bird, nest and eggs described by you are referable to the Hairy Woodpecker.

S. E. D.,—The eggs of the Downy Woodpecker are deposited during the second or third week in May, in New York and New England, but much earlier as we proceed southward.

P. C. S., Simeoe, Ont.—Your large hawk of an ash-blue color, barred with darker on the back, well feathered down the leg, and having red iris, accords more nearly with the American Goshawk than any other.

P. H. H., Wenham, Mass.—1. Would like to know if Woodpeckers, Chickadees and others birds nesting in cavities in trees, use their excavations more than one season. Who will tell us? 2. The Cooper's Hawk nests in your vicinity about the middle of May.

Name mislaid.—"If we collected a set of eggs and did not kill the bird, how would we write the 'identity' in the data, if we were positive what kind of eggs they were?" Well, I think we would be tempted to write, as we have often seen it, "s-h-u-r-e."

W. H. P., Ashtabula, O.—Have used cotton batting in egg cabinets for

several years and was never troubled as you state. Do not know where you can get the material you mention. Eggs in collections should not be exposed to the light then, too, pink cotton would not fade.

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Scraps from Many Note-Books.

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Herbert W. McBride, Waterloo, Ind., writes of a set of two eggs of the Red-tailed Hawk taken by him March 29, which were unusually large. They measured respectively 2.50 x 1.98 and 2.49 x 1.99 in. The nest was in a black-ash tree, 65 feet from the ground.

F. C. Browne, of Framingham, Mass., writes us that a correspondent of his in Western Michigan informs him of having taken on March 6th, a set of three eggs of the Great Horned Owl, the thermometer being 30° below zero that morning and had been below nearly every morning for two weeks.

H. A. Hess, of Edinburg, Ind., relates the taking of a Trumpeter Swan by Mr. George Dudley on the Clifty Creek, being the third bird of that species taken in that vicinity in a period of five years. Although a not uncommon migrant there, he says it rarely stops on their waters.

Under date of April 12, A. E. Kibbe, of Mayville, N. Y., writes: "I have just mounted two nice Trumpeter Swans sent from Indiana. One measured 7 feet 2 inches from tip to tip, 4 feet 7½ inches in length and weighed 16½ pounds."

M. & C. Quechee, Vt., sends us an interesting account of a trip after eggs. Among other things, they mention taking 8 eggs of the Ruffed Grouse which were as dark as Prairie Hen's and spotted.

Through a letter from Mr. N. R.

Christie, of Rye Patch, Nev., we learn something of what collectors in that "far west" country have to contend with.

Mr. Christie inserted an advertisement in the county paper—soliciting bird's eggs of certain species and stating that he would pay cash for the same. In the most prominent column of the next issue appeared an article entitled "Bird's Eggs—A Penalty for Taking them From their Nest," which article, after calling attention to Mr. Christie's advertisement, quoted the law on the subject and stated the penalty for taking the eggs of birds, and then closed with a warning injunction that trouble and "jails" awaited those who disturbed such nests. Surely the collectors of the Silver State are not to be envied. It seems at least, that the State Legislature ought to make some distinction between scientific collecting and "robbing bird's nests."

An exceedingly early nest of the Cardinal is reported by Harold S. Stabler, of Sandy Spring, Md. He reports a nest begun on February 4th.

Among the many records of early arrivals which have been sent us, are Robins the last week in January, Bluebirds, February 23rd, and Red-winged Blackbirds March 2nd, by W. E. Aiken, Rutland Co., Vt. Also by F. Leon Englebert, Des Moines, Ia., Chipping Sparrows and Phoebes, February 18th; and Bluebirds, February 21.

L. E., Fairview, Mo., asks a rather hectic (?) question. He says: "Do Birds die with consumption? Last year one of my pet birds, a parrot, died very suddenly and, not knowing the cause, I took him to one of my friends to be examined and preserved. He examined him and when he told me the bird died of consumption, I laughed

at him. Then we went to a doctor who is quite a bird crank himself. He told me the same and not until then did I believe it. Some of my friends (collectors) do not agree with me and I would, therefore, like to have the opinion of the majority."

Under date of April 7th, Clarence A. Smith, of Gainesville, Fla., writes: "Nesting is just begun here. Logger-head Shrikes have finished building and Mockingbirds have just begun. I took a set of three Red-bellied Woodpeckers to-day, also observed a pair of Red-headed Woodpeckers making a cavity in a dead pine."

On the 19th ult., ye Associate Editor and E. J. Botsford, while enjoying a ramble near Medina, found, in a dense thicket of underbrush in a marsh, and impaled on a sharpened twig of one of the bushes, a Robin's head entire. Only a few rods away was an orchard, in which a completed nest of the White-rumped Shrike had just been found with the birds near by, and to them was probably traceable the Robin's tragedy.

W. A. Merritt, Washington, D. C., reports some early sets of Crow's eggs, as follows:

March 29, 1890. A set of four eggs of *Corvus frugivorus*.

April 5th. A set of five eggs of *Corvus frugivorus* and one of five eggs of *Corvus ossifragus*.

Percy Smith, Simcoe, Ont., writes: "A few days ago we noticed that the vegetables in our cellar were being gnawed, presumably by rats. I set a trap, but caught a beautiful Flying Squirrel. Length, 10 inches; extent, 8 inches. I made a skin of him. As these little fellows have been in the cellar other winters, I think that they must hibernate in such places."

Prairie Warbler.  
(*Dendroica discolor*.)

This bird rarely breeds here, but on the 21st of May, 1888, I had the good luck to find one of their nests.

While passing through an old field that had grown up to a thicket of sassafras and other bushes eight to ten feet high, I was attracted by the bird's peculiar chirp. On looking around, I espied the nest in a small hickory bush, about three feet from the ground.

The nest contained one egg then, but in four days, the set of five eggs was complete.

The nest was a model of neatness, very compact and deep, measuring on the inside  $1\frac{1}{2}$  inches deep by  $1\frac{1}{2}$  inches across. It is composed of grass, bark, lint and down, from the milk-weed; lined with horse hair, feathers and fine grass.

The eggs measured .63 x .46 and were slightly tinged with greenish, speckled with chestnut, with lighter shell markings in the form of a wreath around the large end.

F. C. POINDEXTER,  
Bartle, Indiana.

Rose-breasted Grosbeak.

I have not seen much in the OOLOGIST about the Rose-breasted Grosbeak (*Zamelodia ludoviciana*) and as it has been my luck to find several nests, I write this article hoping it will be of interest to the readers. This bird is noted for its voice and beauty. It is plump and round. The male's head and neck are black, bill whitish, wings and tail white and black, the breast and under wing coverts, rosy or carmine red. The female's wings and neck are blackish and olive brown; the under wing coverts are yellowish. The nest is of a shallow structure, made of twigs, etc., and is rather oval in shape; the eggs are three to five in number.



They are of a bluish green or greenish blue in color, spotted thickly of reddish brown. Sizes range from .95 to 1.08 in length by 70 to 76 in breadth.

GLOVER M. ALLEN,  
Middlesex Co., Mass.

#### Winter Birds in Spring.

March 28. On looking out of the window I was very much surprised to see the ground covered with snow, in some places to the depth of two feet. Only the day before I had seen the early spring birds. The weather was very cold, but I could still hear the song of *Melospiza melodia*.

March 29. Snow again fell, and it brought numbers of Redpolls, Tree Sparrows, and; much to my surprise, a large flock of Snow Buntings and Crossbills, into the city. The Snow Buntings congregated in a vacant lot where I procured three of them, and the Crossbills stopped to feed on the cones of some hemlocks across the road. Of these I got five, all American Crossbills. Concluding that the main flock must be somewhere in the vicinity of the city, I took my gun and went in search of them. After considerable walking we found the flock which, on rising, seemed to fill the air like so many huge snowflakes. We procured as many of these as were wanted and among them a male, with clear white head and breast, and in place of the greyish-black and chestnut markings on the back, it was jet black; and we also secured two females of the usual color, alive, they being slightly "wing-tipped." We saw several more of these White Buntings, which I believe is their summer plumage.

On our way home we saw a large flock of Robins, Meadow Larks, Juncos, Song and Tree Sparrows; also some Blackbirds and Redpolls, near a hemlock wood, where they could fly for shelter from the storm. It was proba-

bly the recent snow storms which drove these northern birds back, but notwithstanding this, was it not very late for them to be loitering here?

CHAS. C. TREMBLY,  
Oneida Co., N. Y.

#### Some "Pun"-gent Sentences.

A "tough" bird—the jay.  
A cheating bird—the gull.  
A boasting bird—the crow.  
A dishonest bird—the robin.  
A rude bird—the mocking bird.  
An untruthful bird—the lyre bird.  
A low spirited bird—the blue bird.  
A "cabinet" bird—the secretary bird.

E. J. BOTSFORD,  
Medina, N. Y.

#### Great Gray Owls.

On January last there was shot in Franklin Co. a Great Gray or Cinereous Owl; also one was taken in Chittenden Co. the same week and the two specimens are now in my collection.

This owl is a very rare visitor in Vermont.

There were several Snowy Owls captured here this winter.

S. O. BRUSH,  
Chittenden Co., Vt.

#### A Valuable Work.

We have received from Messrs. W. W. Crooks & Co., of Gilman, Ill., a copy of Jordan's "Manual of the Vertebrates" of the Northern United States, including the district north and east of the Ozark Mountains, south of the Laurentian Hills, north of the southern boundary of Virginia, and east of the Missouri River—inclusive of marine species. Fifth Edition.

The design of the work is to give to students and collectors a ready means of identifying the Vertebrate fauna of the region which it covers, and of recognizing the characters on which the families, genera, and species of these animals are founded.

The work is greatly condensed, giving the reader "much in little." All descriptions are very concise with as few repetitions as possible.

The order of arrangement, is that

now generally favored, namely of putting the lowest forms first. The arrangement of the fishes is essentially that of Jordan and Gilbert's "Synopsis of the Fishes of North America;" the arrangement of the Batrachians and Reptiles is essentially that set forth in the various papers of Prof. Edward D. Cope; while in the nomenclature and classification of the Birds, the author adopts the "Check List of North American Birds," published by the American Ornithologists' Union.

The work covering 375 pages with index, enumerates 487 species of fishes, 43 species of batrachians, 95 of reptiles, 403 of birds and 117 of mammals.

A fair idea of the plan of the work can best be given by quotations from it. The following will give some idea: "Class E. *Pisces*. Subclass *Selachii*. Order *Raiuæ* (The Rays.) Family *Pristigildæ* (The Saw-fishes.) Genus *Pristis* (Latham) 24 *P. pectinatus* Latham. Saw-Fish.

Saw with 25 to 28 pairs of spines. Length 10 feet. West Indies; occasional N. (Lat., comb-toothed.)"

"Class H. *Aves*. Order *Pici*. (The Woodpeckers and Wrynecks.) Family *Picidæ* (The Woodpeckers.) Genus *Colaptes* (Swainson) 852. *C. auratus* (L.) Yellow-Hammer. Flicker. Golden-winged Woodpecker. High-Holder. Head ashy, with red nuchal crescent; back drab-color, barred with black; rump white; below pinkish brown shading into yellowish; a black crescent on breast; belly with numerous round black spots; shafts and under surfaces of quills golden yellow; male with a black maxillary patch. Length 12½. Wing 6. Tail 4½. Eastern North America, abundant."

The student will at once see the value of such a work. Speaking only of the treatment given the class *Aves*, it is too valuable a work for any ornithologist, (experienced or amateur) to be without. One thing with which many bird students all over the country are unfamiliar, is the classification of our birds. Oftentimes, those who have an excellent knowledge of ornithology (specifically speaking) are lost when they come to tell to what family or order a given species belongs.

The work under consideration is just what every bird student needs to overcome these difficulties as well as to readily identify any specimen of doubtful identity.

One thing that strikes us as almost

marvelous, is the amount of knowledge that is crowded into a small space. 1145 species are treated of thoroughly and minutely, enabling anyone to identify specimens readily therefrom, and all inside of 375 pages.

Everything is concise, sufficient, to the point, and just what every student of any of the forms of the *Vertebrata* should have by him for ready reference.

#### Methods in the Art of Taxidermy.

We desire to call the special attention of the readers of THE OOLOGIST to Mr. Oliver Davie's new work "Methods in the Art of Taxidermy".

Mr. Davie is well and favorably known to American Ornithologists and Oologists as a publisher that always gives his patrons *two hundred cents on a dollar*.

The original plates for his new work have cost him \$1,000 in cash. We have had the privilege of examining 40 of them and must say that they alone without text make the Art so plain that if you could see them we are certain you would quickly give \$5.00 for duplicates. Mr. Davie has already devoted six years of time and labor on this work, and now to publish 500 copies as he proposes will cost him \$2,500 IN CASH. Already he has received subscriptions for 100 copies but before he can publish the work he needs 400 more. We trust that he will find a goodly portion of this number among the readers of THE OOLOGIST. He asks no money until the work is published. Write him at once for subscription blank properly fill the same and return it to him by next mail. To any of our readers who will write Mr. Davie for a blank and properly fill the same, stating to him that they subscribe for his work, through the recommendation of the publisher of THE OOLOGIST, we will, if you are not more than pleased with the work when published, give you \$5.00 in cash for your copy and present you with a years subscription to THE OOLOGIST, for your trouble.

We do not receive *one cent* from Mr. D. for making this offer; for writing this article; or for the two page adv. in this OOLOGIST, but make and publish the same for the benefit of our patrons that they too can aid Mr. D. in completing this valuable work, from which he anticipates no financial reward.

# A New Work on Taxidermy.

Important to Taxidermists, Naturalists and All Persons Desiring to Learn  
the Art of Taxidermy.

In reply to the many inquiries regarding the progress of my large work on Taxidermy, which has been mentioned at various times by the press, I desire to make the following announcement. Before giving the plan and style of publication a description of the work is necessary. This, however, must be very brief.

The text is written by Oliver Davie and the illustrations have been made by Dr. Theodore Jasper. The drawings, which are at present in the original India ink, were begun over six years ago and were made only at times when inspiration prompted. The number FIFTY FULL PAGE PLATES with several hundred figures representing every stage in the skinning and mounting of Birds, Mammals, Reptiles and Fishes, together with characteristic attitudes of various groups of the animal kingdom.

Some idea of the minuteness of the illustrations may be obtained by examining the plate illustrating the skinning of a bird. The common Robin is taken as an example. The plate contains ten figures, illustrating every stage of skinning the bird; figure 1 showing where to make the first cut and every procedure is illustrated until the bird is completely skinned in figure 10. The companion plate, on the mounting, contains fourteen figures showing every procedure in making the artificial body, adjusting the wings, filling the neck skin, wiring the legs, inserting the artificial body, sewing up the specimen and mounting it on a temporary stand. This is followed by another plate showing the Robin bound in threads and complete. Here on the same plate are figures showing how to obtain accurate running and stepping attitudes of birds, based upon simple anatomical principles.

Plates with figures illustrating all the variations in the skinning of birds are given and a new method of skinning and mounting birds called the "breast cut" method, is illustrated in two plates of ten figures. Probably the most interesting plate to the taxidermist, as well as to the beginner, will be the one containing four figures, illustrating a new, simple and accurate method of mounting long-necked birds. To those following taxidermy for profit or pleasure, the information imparted in this plate alone will be worth more than the entire cost of the work. There are three plates which thoroughly and beautifully illustrate the best methods of making good bird-skins. Twelve plates figure in the finest style the forms and attitudes of Grebes, Loons, Cormorants, Gulls, Terns, Ducks, Geese, Swans, Herons, Hawks, Owls, Grouse, and the smaller perching birds. Four figures in one plate illustrate explicitly the muscular anatomy of Hawks and Owls with an imaginary outline of feathers and the exact position of legs with the artificial muscles in the mounted specimens.

The same detailed correctness is followed in the skinning and mouting of Mammals, the Fox squirrel being taken as the example in the smaller quadrupeds, is represented by six figures on one plate, delineating the procedures of skinning the animal and modeling the head; the companion plate illustrating every stage in the process of mounting. In the larger and short-haired Mammals the methods of building the frame-work and modeling in clay are illustrated. For this purpose the Greyhound, Horse and Elephant have been selected, the drawings being made from the actual specimens in the course of preparation. These occupy several plates beginning from the skeleton frame-work to the completed animal. A plate clearly outlining the method of taking the measurements of large animals and other details are given, while two plates figure minutely the methods of mounting Fish, Bird and Animal heads, and two others furnish ideal mounted Dog, Deer, Fox and Antelope heads. One entire plate is devoted to a group of mounted Dog heads of seven different species. Two others consist of mounted Setter and Pointer Dogs, taken from the actual mounted specimens. The illustrations showing the methods of mounting and skinning Snakes, Reptiles, Turtles and Fishes are faithfully executed. One entire plate is devoted to the skinning and mounting of Frogs. Others represent figures showing how to fill with clay the tails of Beavers, Muskrats, flippers of Seals, Sea Lions, etc., etc.

Ten plates contain accurate attitudes of Elk, Deer, Bear, Lion, Wild Cat, Muskrat, Beaver, Fox, Weasel, Ferret, Moles, Shrews, etc., etc. The entire muscular system of quadrupeds is illustrated in two figures, together with three others showing the proper formation and modeling of the head, nostrils and lips of animals with clay. All the instruments used in Taxidermy are illustrated.

The text for this work is simple, clear and concise, conforming and referring to the plates throughout. It consists of the skinning and mounting of birds, variations in the skinning and mounting of birds, making scientific skins, the best method of softening or relaxing skins and the time required in each case; mounting birds with the wings spread; new method of mounting long-necked birds; the manipulation of the dry skins of Mammals and all pertaining to the mounting of their skins fresh or dry; modeling in clay, etc., etc. No theoretical methods or illustrations are offered in the work—simply those that have been obtained by actual experience. Besides the regular text a concise description will face each plate which will enable immediate reference when all the details are not desired. It has already been said by those who have examined the illustrations that they are so complete in their exposition of the art of Taxidermy that there is really little need of text matter. Our design from the beginning has been to make this a grand work, superior to anything that has yet appeared in the literature of Taxidermy. Nothing like it has appeared in any language or in any country, the quality of the illustrations being of the highest order, delineating as they do, everything that has long been desired in the Art.

### PLAN OF PUBLICATION.

Knowing that there is a great demand for a thorough work on Taxidermy at a lower price than was our first intention to publish, I have decided to reduce the size of the illustrations from that in the originals, printing them on plate paper 7 x 10 inches, thus making a work of royal octavo size. The engravings will be executed in the finest style and the work will be printed for me by one of the best publishing houses in New York City, and I am assured that as an example of book making it will be one of the best, and will be known as *Edition de luxe*. It will be tastefully bound in cloth, gilt uncut edges and gilt top.

Provided I can secure 500 *bona fide* subscribers at \$5.00 per copy, the work will appear complete in one royal octavo volume in September, 1890.

Considering the expense already incurred in securing the illustrations and the immediate outlay in producing the book I feel confident that no publisher would undertake the work without yielding him at least double the amount per copy of the price asked.

As the work has been purely a labor of love with me I feel sure that it will agreeably surprise my subscribers, but under no consideration will the book be published in the form herein stated unless the 500 subscribers can be assured.

I would not, however have it understood that the information contained in this work is all my own. My eighteen years experience as a Taxidermist is backed by that of Dr. Jasper who has practiced the art of Taxidermy in France, Germany and in this country for more than fifty years. He is thoroughly conversant with the best methods employed in the modeling and building up of the structures of Mammals and in every detail in the entire art, possessing at the same time an extraordinary ability for depicting these subjects with pen and brush, while his mounted specimens fairly rival some of the examples in the higher plastic arts.

I have selected for the title of the work, "Methods in the Art of Taxidermy."

Within thirty days from the delivery of the complete volume, subscribers will receive at least two proof illustrations and a printed "Contents" of the work. I trust that you will send *at once* for a subscription blank, which I hope you will, after due consideration, sign and return to me so that I may know as *soon as possible* the results of this proposition. A prompt reply will also cause no delay in the mechanical execution of the work.

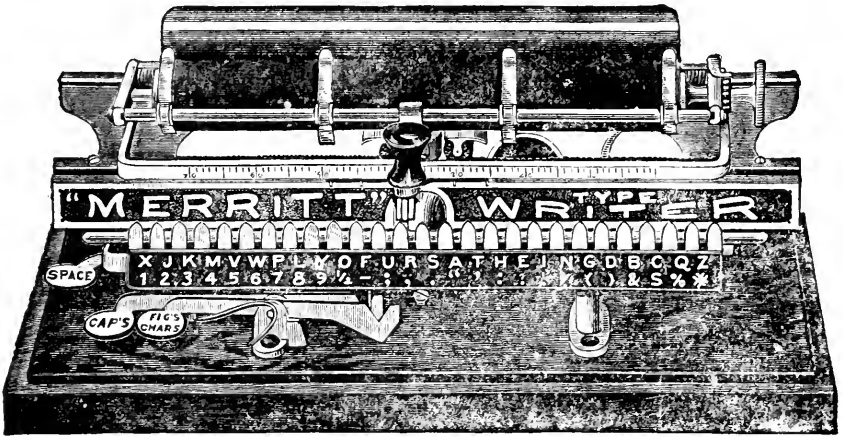
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## PAGES FROM THE NEW CATALOGUE

OF  
SPECIMENS AND SUPPLIES

FOR SALE BY

# FRANK H. LATTIN,

ALBION,

Orleans Co., N. Y.

In this issue of THE OOLOGIST we give our regular prices for  
**Birds' Eggs, Oologists' and Entomologists'  
Instruments and Supplies, Fishing  
Tackle, and Maynard's American Flobert.**

## FOR 1890.

If you are not already a subscriber of THE OOLOGIST it will be mailed you during 1890 as a premium with your first order of \$2.00 or over—this offer holds good until 1891. Send in your orders early and often. Make your remittances in most convenient manner. Remember we always

# BIRDS' EGGS.

Eggs are numbered to correspond with Ridgeway's Nomenclature.

All eggs are carefully prepared, being blown from one smoothly drilled hole in the side and are warranted true to name.

All specimens will be carefully packed in strong tin or wooden boxes and sent at *purchasers'* risk by mail or at *our* risk by express.

Small orders under 50 cents must contain 5 cents for packing and return postage.

Eggs in original sets, with data, can be furnished when desired.

The following discounts will be allowed on orders for single eggs:—

Ten per cent. on orders amounting to two dollars.

Fifteen per cent. on orders amounting to three dollars.

Twenty per cent. on orders amounting to five dollars.

Twenty-five per cent. on orders amounting to ten dollars or over.

SECOND-CLASS SPECIMENS can be furnished of most species at one-half the price of a first-class one. Parties ordering second-class eggs must name a list of extra eggs to be used as substitutes, in case we are out of those ordered.

Western Grebe.....	\$ 70	Cannet.....	35	Yellow-crowned Night Heron.....	25
Holboell's Grebe.....	50	Anhinga.....	25	Limpkin.....	1 25
Horned Grebe.....	35	Cormorant.....	70	King Rail.....	20
American Eared Grebe.....	25	Double-crested Cormorant.....	35	Clapper Rail.....	10
Pied-billed Grebe.....	10	Florida Cormorant.....	25	Virginia Rail.....	20
Loon.....	1 50	Baird's Cormorant.....	50	Spotted Crane.....	20
Black-throated Loon.....	1 50	Baird's Cormorant.....	50	Sora.....	10
Red-throated Loon.....	75	American White Pelican.....	50	Corn Crane.....	20
Tufted Puffin.....	1 00	Brown Pelican.....	25	Purple Gallinule.....	20
Puffin.....	20	American Merganser.....	1 00	Florida Gallinule.....	12
Cassin's Auklet.....	3 00	Red-breasted Merganser.....	50	European Coot.....	15
Black Guillemot.....	20	Mallard.....	20	American Coot.....	10
Murre.....	20	Black Duck.....	40	Red Phalarope.....	1 00
California Murre.....	25	Florida Duck.....	2 00	Northern Phalarope.....	50
Brunnich's Murre.....	25	Godwall.....	70	American Avocet.....	75
Great Auk (cast of egg).....	1 50	Widgeon.....	25	Black-necked Stilt.....	75
Razor-billed Auk.....	20	Faldpate.....	75	European Woodcock.....	1 75
Skua.....	75	European Teal.....	20	American Woodcock.....	1 25
Parasitic Jaeger.....	60	Blue-winged Teal.....	25	European Snipe.....	25
Long-tailed Jaeger.....	1 25	Shoveller.....	40	Dunlin.....	35
Kittiwake.....	40	Pintail.....	40	Black-tailed Godwit.....	50
Glaucous Gull.....	55	Wood Duck.....	75	Willet.....	40
Iceland Gull.....	1 50	Redhead.....	25	Buff.....	20
Great Black-backed Gull.....	50	American Scaup Duck.....	60	Bartramian Sandpiper.....	40
Western Gull.....	25	American Golden-eye.....	75	Spotted Sandpiper.....	15
Herring Gull.....	20	Barrow's Golden-eye.....	1 00	Long-billed Curlew.....	75
American Herring Gull.....	20	Oldsquaw.....	40	Whimbrel.....	40
California Gull.....	30	Barbquin Duck.....	1 25	Lapwing.....	15
Ring-billed Gull.....	30	Greenland Eider.....	50	Golden Plover.....	40
Mew Gull.....	35	American Eider.....	20	Killdeer.....	20
Laughing Gull.....	25	American Scoter.....	2 00	Ring Plover.....	20
Franklin's Gull.....	75	Buddy Duck.....	70	Little Ring Plover.....	25
Gull-billed Tern.....	15	White-fronted Goose.....	1 40	Wilson's Plover.....	25
Caspian Tern.....	50	Canada Goose.....	1 00	Oyster-catcher.....	25
Royal Tern.....	40	Whooping Swan.....	1 40	American Oyster-catcher.....	70
Cabot's Tern.....	40	Whisking Swan.....	2 50	Bob-white.....	10
Forster's Tern.....	15	American Hamingo.....	1 00	Florida Bob-white.....	15
Common Tern.....	08	Roseate Spoonbill.....	1 00	Texas Bob-white.....	10
Arctic Tern.....	15	White Ibis.....	25	Chestnut-bellied Scaled Partridge.....	50
Roseate Tern.....	15	American Bittern.....	1 25	California Partridge.....	10
Least Tern.....	05	Least Bittern.....	20	Valley Partridge.....	20
Sooty Tern.....	75	Great White Heron.....	1 25	Gambel's Partridge.....	25
Bridled Tern.....	2 00	Ward's Heron.....	40	Buff d Grouse.....	15
Black Tern.....	12	Great Blue Heron.....	25	Willow Ptarmigan.....	75
White-winged Black Tern.....	40	European Blue Heron.....	20	Rock Ptarmigan.....	1 00
Noddy.....	75	American Egret.....	25	Prairie Hen.....	20
Black Skimmer.....	75	Snowy Heron.....	15	Sharp-tailed Grouse.....	75
Fulmar.....	75	Red-sh Heron.....	40	Sage Grouse.....	60
Manx Shearwater.....	1 00	Louisiana Heron.....	10	Wild Turkey.....	75
Audubon's Shearwater.....	2 00	Little Blue Heron.....	10	Chachalaca.....	1 00
Stormy Petrel.....	10	Green Heron.....	10	Black-billed Pigeon.....	2 00
Leach's Petrel.....	10	Black-crowned Night Heron.....	10		



FRANK H. LATTIN, ALBION, N. Y.

Mourning Dove.....	03	Prairie Horned Lark.....	20	Bank Swallow.....	04
White-winged Dove.....	30	Desert Horned Lark.....	20	Rough-winged Swallow.....	20
Ground Dove.....	25	Ruddy Horned Lark.....	35	Cedar Waxwing.....	10
Inca Dove.....	75	American Magpie.....	25	Phainopepla.....	50
Turkey Vulture.....	75	Yellow-billed Magpie.....	75	Loggerhead Shrike.....	15
Black Vulture.....	75	Blue Jay.....	05	White-rumped Shrike.....	08
Mississippi Kite.....	10 00	Florida Blue Jay.....	50	California Shrike.....	08
Marsh Hawk.....	40	Florida Jay.....	1 50	Red-eyed Vireo.....	20
Sharp-shinned Hawk.....	1 00	California Jay.....	2 50	Warbling Vireo.....	20
Cooper's Hawk.....	30	Northern Raven.....	1 50	Yellow-throated Vireo.....	35
Harris' Hawk.....	75	American Crow.....	05	White-eyed Vireo.....	20
European Buzzard.....	35	Florida Crow.....	50	Belt's Vireo.....	15
Red-tailed Hawk.....	60	Northwest Crow.....	50	Prothonotary Warbler.....	30
Western Red-tail.....	75	Fish Crow.....	25	Golden-winged Warbler.....	75
Red-shouldered Hawk.....	50	Starling.....	10	Nashville Warbler.....	75
Red-bellied Hawk.....	1 00	Bobolink.....	20	Parula Warbler.....	25
Swallow's Hawk.....	75	Cowbird.....	05	Yellow Warbler.....	05
Broad-winged Hawk.....	1 25	Dwarf Cowbird.....	20	Black-throated Blue Warbler.....	75
Rough-legged Hawk.....	50	Yellow-headed Blackbird.....	05	Magnolia Warbler.....	70
Golden Eagle.....	8 00	Red-winged Blackbird.....	10	Chestnut-sided Warbler.....	20
Gray Sea Eagle.....	2 00	Colored Blackbird.....	10	Black-poll Warbler.....	75
Bald Eagle.....	5 00	Tricolored Blackbird.....	2 50	Black-throated Green Warbler.....	75
Duck Hawk.....	3 00	Meadowlark.....	12	Prairie Warbler.....	75
Merlin.....	50	Western Meadowlark.....	12	Oven-bird.....	15
Kestrel.....	25	Hooded Oriole.....	50	Louisiana Water-thrush.....	50
American Sparrow Hawk.....	25	Orchard Oriole.....	10	Maryland Yellow-throat.....	15
Audubon's Caracara.....	1 25	Baltimore Oriole.....	10	Western Yellow-throat.....	25
American Osprey.....	50	Bullock's Oriole.....	15	Yellow-breasted Chat.....	10
American Barn Owl.....	3 50	Brewer's Blackbird.....	05	Long-tailed Chat.....	15
American Long-eared Owl.....	1 25	Purple Grackle.....	04	American Redstart.....	15
Short-eared Owl.....	8 50	Bronzed Grackle.....	10	White Wagtail.....	10
Barn Owl.....	1 00	Great-tailed Grackle.....	10	Meadow Pipit.....	10
Florida Barn Owl.....	1 00	Boat-tailed Grackle.....	10	American Dipper.....	1 00
Screech Owl.....	40	Purple Finch.....	15	Mockingbird.....	05
Florida Screech Owl.....	70	House Finch.....	06	Catbird.....	02
Texas Screech Owl.....	50	Redpoll.....	50	brown Thrasher.....	03
California Screech Owl.....	50	American Goldfinch.....	68	Texas Thrasher.....	30
Great Horned Owl.....	1 25	Arkansas Goldfinch.....	20	Curve-billed Thrasher.....	25
Western Horned Owl.....	1 25	Lawrence's Goldfinch.....	25	California Thrasher.....	25
Hawk Owl.....	1 00	Snowflake.....	50	Cactus Wren.....	12
Burrowing Owl.....	25	Lapland Longspur.....	75	Carolina Wren.....	15
Groove-billed Ani.....	1 00	Grass Finch.....	05	Bewick's Wren.....	50
Road-runner.....	25	Western Vesper Sparrow.....	15	Vigors' Wren.....	25
Yellow-billed Cuckoo.....	10	Savanna Sparrow.....	12	Band's Wren.....	25
California Cuckoo.....	25	Western Savanna Sparrow.....	26	House Wren.....	06
Black-billed Cuckoo.....	12	Yellow-winged Sparrow.....	30	Western House Wren.....	06
Belted Kingfisher.....	20	W. Yellow-winged Sparrow.....	20	Long-billed Marsh Wren.....	06
Hairy Woodpecker.....	50	Sharp-tailed Sparrow.....	35	Tule Wren.....	15
Dorsey Woodpecker.....	20	Seaside Sparrow.....	25	White-breasted Nuthatch.....	30
Red-ockaded Woodpecker.....	1 25	Lark Sparrow.....	05	Brown-headed Nuthatch.....	35
Pileated Woodpecker.....	1 00	W. Lark Sparrow.....	05	Tufted Titmouse.....	35
Red-headed Woodpecker.....	08	Campbell's Sparrow.....	25	Plain Titmouse.....	50
Leisler's Woodpecker.....	40	White-throated Sparrow.....	3 50	Chickadee.....	12
Red-bellied Woodpecker.....	20	Chipping Sparrow.....	02	Carolina Chickadee.....	15
Golden-fronted Woodpecker.....	75	Western Chipping Sparrow.....	10	California Bush-Tit.....	15
Flicker.....	03	Field Sparrow.....	04	Verdin.....	50
Red-shafted Flicker.....	10	State-colored Junco.....	20	Blue-gray Gnatcatcher.....	20
Chuck-will's-widow.....	1 50	Black-throated Sparrow.....	5 50	Western Gnatcatcher.....	50
Whip-poor-will.....	1 50	Song Sparrow.....	02	Wood Thrush.....	06
Nighthawk.....	40	Desert Song Sparrow.....	50	Wilson's Thrush.....	15
Western Nighthawk.....	50	Heermann's Song Sparrow.....	12	Russet-backed Thrush.....	15
Chimney Swift.....	15	Sanibel's Song Sparrow.....	08	Olive-backed Thrush.....	40
Ruby-throated Hummingbird.....	60	Swamp Sparrow.....	15	Hernit Thrush.....	40
Costa's Hummingbird.....	1 00	Towhee.....	25	American Robin.....	02
Anna's Hummingbird.....	50	Spurred Towhee.....	40	Western Robin.....	15
Scissor-tailed Flycatcher.....	10	Oregon Towhee.....	40	Red-spotted Bluethroat.....	60
Kingbird.....	03	California Towhee.....	05	White-throated Bluethroat.....	10
Gray Kingbird.....	40	Cardinal.....	08	Western Bluebird.....	15
Arkansas Kingbird.....	08	Texas Cardinal.....	15	Mountain Bluebird.....	15
Cassin's Kingbird.....	25	Rose-breasted Grosbeak.....	2 50	English Sparrow.....	01
Ash-throated Flycatcher.....	25	Black-headed Grosbeak.....	2 50	European Tree Sparrow.....	15
Crested Flycatcher.....	12	Blue Grosbeak.....	2 50		
Phoebe.....	05	Indigo Bunting.....	05		
Say's Phoebe.....	20	Lezall Bunting.....	23		
Black Phoebe.....	20	Painted Bunting.....	10		
Wood Pewee.....	15	Grassquit.....	7 50		
Western Wood Pewee.....	20	Black-throated Bunting.....	05		
Western Flycatcher.....	15	Lark Bunting.....	50		
Acadian Flycatcher.....	20	Scarlet Tanager.....	20		
Little Flycatcher.....	4 50	Summer Tanager.....	25		
Trail's Flycatcher.....	20	Purple Martin.....	15		
Least Flycatcher.....	12	Chil Swallow.....	05		
Skylark.....	19	Barn Swallow.....	05		
		Tree Swallow.....	15		
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				Alligator.....	27
				Turtle.....	10
				Snake.....	10
				Copier.....	25

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Every Instrument I sell is thoroughly tested before leaving the office, and should an inferior instrument be sent my patrons, I will kindly thank them to return the same and their order will be cheerfully duplicated.

**EGG DRILLS.**—Our drills are equal to any in the market. Short-handled drills we make a specialty. Collectors will find them more convenient and less expensive than the long-handled ones. Our drills are made expressly for our trade from the best stubbs steel. The lengths of handles are as follows: Short, 2 in.; Medium, 3 in.; Long, 6 in.

No.1. Sh't hand., 8-100, good for all fresh eggs, \$ .07
No.2. " " 12-100, " " " " " " .09
No.3. " " 15-100, " " " " " " .11
No.4. " " 18-100, " " " " " " .13
No.5. " " 21-100, " " " " " " .15
No.0. Medium handle, fine cut, burr 4-32 in. .20

Our medium and long-handled egg drills are the finest in the world. They are made with a fine, clean cut burr, fine point, nickel plated and engraved handle. Best style, extra fine steel. We can furnish either long or medium handle of any the following sizes at prices quoted:

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No. 2. 5.32 " " " " " " .35
No. 3. 6.32 " " " " " " .50
No. 4. 8.32 " " " " " " .75
No. 5. 12.32 " " " " " " 1.00
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**BLOWPIPES.**—No. 1, Brass.....\$ .12  
No. 2, White Metal..... .20  
No. 3, No. 2, nicked..... .25  
(Nos. 2 and 3 are the white metal blowers sold by other dealers.)

No. 4 is the best blower ever manufactured; best white metal with an extra nickel finish, actually worth double No. 2 or 3. .35  
No. 5, Glass: by mail at purchaser's risk.....25

**EMBRYO HOOKS.**—As the season advances collectors obtain many specimens of our rarer species that are nearly useless on account of the advanced stage of incubation. To overcome, in a measure, this difficulty, every collector should have a good embryo hook.

No. 1. Long handle, nickel and engraved or blued steel; three sizes, fine, medium and large, price each.....\$ .30
No. 2. This style hook is the best made and screws into a finely engraved, nicked handle.
Handles, each..... .25
Hooks (three sizes), each..... .20
Handle and Hook..... .40
Handle with three hooks (assorted sizes) .75
No. 3. The cheap wire hook in handle, sold by other dealers..... .15
Do., without handle..... .10

**EMBRYO SCISSORS.**—Sometimes very useful in removing embryos.

No. 1. Fine scissors, cheap.....\$ .25
No. 2. Fine scissors, extra..... .50
No. 3. Fine scissors, curved..... .75
No. 4. Fine scissors, curved, extra..... 1.50
No. 5. Fine scissors, elbow, extra..... 1.50
No. 6. Fine scissors, straight, extra..... 1.50

**FORCEPS.**—Very useful when preparing specimens containing an embryo.

Cheap.....\$ .15
Ordinary..... .25
Best..... .75

**CLIMBING IRONS.**—Strapped, ready for use; by express, at purchaser's expense, \$2.50; prepaid, \$3.25.

Unstrapped: by express, \$1.50; prepaid, \$2.10.

**SYRINGES.**—Hard rubber, for rinsing eggs...\$ .35

**LEAD PENCILS.**—Soft, extra quality for marking eggs..... .10

**COLORED PENCILS.**—Red and blue..... .10

**OOLOGISTS' CEMENT.**—For mending eggs and fragile specimens..... .12

**COURT PLASTER.**—Per envelope of 3 pieces, assorted colors, 6c.

**POCKET CASE.**—Russia Leather for carrying instruments in field. Very desirable. Nickel clasp, \$1.25

**BOOK or TISSUE PAPER.**—For patching eggs or specimens. This book contains over 100 different shades and colors of 1x2½ inch pieces of tissue paper, tightly bound and so arranged that you can pick out at once the color you desire for the specimen you wish to mend. A price list is also attached, giving prices at which we can furnish any color in large or small quantities. As it only requires a very small piece to patch an ordinary egg this book will last the average oologist many years. Price, only 10c.

**GUMMED PAPER.**—For patching eggs, per sheet..... .10

**RUBBER TUBING.**—For making water blowers, 7c per foot, 8 feet for 50c and for each extra foot, 6c.

**WATER BLOWER.**—Complete, including 8 ft. of tubing, blowpipe, rings, can and printed instructions, for only.....1.00

Collectors who have used it say they will never again blow eggs in the old tiresome, laborious and wind-exhausting method.

**DATA BLANKS.**—Our data blanks are printed on good calendared paper that will not blot through and are put up in pads of 100, glued on top and sides.

Small, per 100.....\$ .15
Medium " " " " " " .20
Large " " " " " " .25
Extra large, per 100..... .35
Book of 100 datas, check book style, best..... .25
" " " " Manilla covers, unpertorated, .30
Checking lists, 2 styles, per doz..... .20
Samples of 20 styles data blanks, etc., and 2 checking lists..... .05

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We can also furnish Blue, Canary or White Cotton of same grade at same price.

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No. 1. Fine six inch. brass trimmed folding rule with a brass calliper attachment, registering 16ths. Should you desire the result in 100ths you can readily obtain it by multiplying by 6 $\frac{3}{4}$ . Price 25cts.

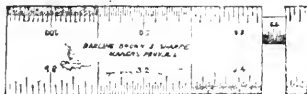
No. 2. Same style as No. 1, except being of ivory, trimmed with German silver; very fine. \$.85

No. 3. Plain 3 in. steel rule, marked in 100ths. Price postpaid, 60 cts

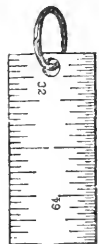


No. 4. A pair of callipers which are very convenient to use when measuring specimens with rule. Price, postpaid, 25 cts.

No. 5. Steel caliper rule registering 100ths.



When closed this rule is 3 in. long. The calliper can be drawn out to measure 2 $\frac{1}{2}$  in. The thickness of the rule is  $\frac{1}{8}$  in. Price, \$2.50.

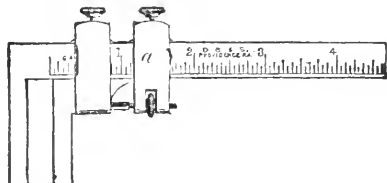


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They are furnished with split ring and make a first-class watch guard charm.

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OUTFIT No. 1, will be sent postpaid for only 40 cents.

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1 Handbook	.....\$1.15
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1 Sample Sheet Datas	..... .02

1 Bottle Cement	..... .12
1 Soft Pencil	..... .10
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1 12-100 Drill	..... .09
1 21-100 Drill	..... .15
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The Cheapest Cartridge Rifle in the Market.

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The MAYNARD AMERICAN FLOBERT is a light target or sporting gun, shooting a 22-100 cal. cartridge and weighs 34 ounces complete. The stock is oil-finished Black Walnut and all metal parts are heavily nickel plated. The sight is adjustable. The hammer is entirely eliminated, making it absolutely the safest gun made for young or inexperienced persons. The firing mechanism is the most durable and simplest used in any gun. Ladies will find in this none of the objections to heavier guns, and its adaptability to use from a carriage or boat are strong points of recommendation.

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The barrel used in the MAYNARD AMERICAN FLOBERT is made of a special composition metal, anti-friction, non-explosive and will not rust or corrode. It is made the exact length necessary to utilize all the explosive force of the cartridge, the ball leaving the muzzle the instant it attains the maximum speed, thus obviating all loss from friction within the barrel, giving the greatest range and penetration possible. Accuracy is secured by as exact rifling as is found in the most expensive rifle. We claim the MAYNARD AMERICAN FLOBERT is the best cheap rifle made and a trial of the gun will convince you of the fact.

All the parts in the MAYNARD are interchangeable, thus making it so that if any should happen to get broken, they can be duplicated at a slight expense.

On April 17th, '90 Frank H. Lattin personally visited the factory at which this wonderful little gun is made and found a large building in which over 30 hands were employed making this gun exclusively. Mr. L. carefully examined all the parts of the gun in various stages of manufacture, from the walnut lumber in the pile to the completed gun. He also saw one pile of boxes in which were packed 3,000 of these guns, an order of a single firm.

After careful examination and thoroughly testing the gun, Mr. L. concluded that it was the gun for collectors and that it could be furnished them at a price within the reach of all.

The editor of the Durand (Mich.) Express, says that he has used the gun in squirrel hunting with the best of success, and that he has been with parties using the high priced Winchester and other makes and that the MAYNARD AMERICAN never failed to bring down the game from the highest of trees, in cases where the guns costing from \$20 to \$25 failed. He also says that after a year's use of the gun he was fully convinced of its durability and effectiveness.

With a 22 cal. shot cartridge, loaded with No. 12 or dust shot, a better gun for the taxidermist or field collector to use on small birds was never invented. The gun is an entirely new invention, having been manufactured only a little over a year, and we are the first to introduce it among collectors, and have been appointed wholesale agent for that purpose.

We desire a good active agent in every locality in the U. S. and Canada and will pay them liberally for their work. To secure the agency, purchase a gun and state that you will do all you can to introduce the gun in your locality and we will send you our best wholesale rates and fifty circulars describing the gun, with your name printed on them as agent.

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We will send it *prepaid* to any part of the U. S. or Canada for 50 cts. additional.

To any person getting up a club or selling five guns and sending us \$10.00 for the same, we will send an additional gun free for their trouble.

Each gun is packed in a case and is accompanied by full directions and two or three targets.

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22 " short " " "	30
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22 " " " " fifty	35

Cartridges must go by express at purchaser's expense. A liberal discount will be allowed on orders of 1000 or over.



# OÖLOGIST.

Monthly.

50c. per Year.

Vol. VII,

ALBION, N. Y., JUNE, 1890.

No. 6

## Exchanges and Wants.

Brief special announcements. "Wants," "Exchanges" inserted in this department for 25 cents per 25 words. Notices over 25 words charged at the rate of one-half cent per word. No notice inserted for less than 25 cents. Notices which are merely indirect methods of soliciting cash purchasers cannot be admitted to these columns under any circumstances. Terms, cash with order.

TO EXCHANGE.—Vol. 4 and 5 and 70 other different papers of Golden Days, for best offer of Birds' Eggs or sets, first-class with data. 816 MUND HILL, Box 25, New Milford, Conn.

TO EXCHANGE.—430 rare Stamps, part unused in Imperial Albion, for best offer of first-class Single Eggs. EDWARD W. BELL, Box 1262, San Jose, Calif.

TO EXCHANGE.—First-class Singles and Sets, with data, to exchange for other first-class Sets. Send list and receive mine. All letters and cards answered. RALPH ARNOLD, Pasadena, Calif. 163

I WILL EXCHANGE Taxidermist outfit No. 1, for a second-hand pair of Climbing Irons, or will sell it for \$1.50. Address, C. C. KENSHAW, Boyce, Clark Co., Va.

WANTED.—To exchange the first six parts (complete in eight parts) of "Eggs of North American Birds" by C. J. Maynard, illustrated with hand colored plates, cost \$3.00, for first-class birds' eggs, either in sets or singles, with full data. DIAN SWEET, Box 118, Strong, Maine.

WANTED.—A trio of Pure Houdan's Chickens. Will give eggs or cash; also eggs to exchange. Send list and receive mine. HENRY C. BRIDGERS, Tarborough, N. C.

WANTED.—To correspond with live collectors in all parts of North America, with a view to making exchanges the coming fall and winter. Only first-class, well identified sets wanted. WALTER F. WEBB, 18 Strathallan Park, Rochester, N. Y.

I HAVE 300 clean Cigarette Pictures and 200 clean Post-marks. Will exchange for best offer of eggs. JOHN W. RICHARDSON, Box 53, Deerling Centre, Maine.

TO EXCHANGE.—A double-barreled Rifle with set trigger, for a R. R. relay, in working order, or for Birds' Eggs amounting to \$5.00. MILES S. HURLBUT, Portland, Box 135, Mich.

BIRD SKINS to exchange. Over 100 first-class varieties, for others of the south and west or for works on ornithology. Coues's Key preferred. Collectors send lists and get mine. H. L. CHEVILON, Richmond, Ill.

EXCHANGE.—A collection of first-class Eggs, about 80 varieties. What have you to exchange? H. J. MENDENHALL, Mendenhall, Chester Co., Pa.

TO EXCHANGE.—First-class singles or original sets, with data in full, for first-class original sets, with data in full. CHAS. H. CULP, Gilroy, Cal.

TO EXCHANGE.—Singles of 143a, 344, 258, 263, 270, 480, 477, 516, Ridgway's Nos. Latin's list, for Singles not in my cabinet. Will also give No. 477, 143a, 324, 480, 270, for any 75 cent egg. Send lists now. JAMES HILL, Elmhurst, Christian Co., Illinois.

I WILL GIVE two first-class eggs of Wild Turkey for best offer of Eggs, in sets, with data, or stamps. What offers? address THOMAS A. SMITHWICK, Plymouth, Washington Co., N. C.

FOR EXCHANGE.—Two Sets, of the first four parts of Jasper's "Birds of N. A.," three colored plates in each and published at \$1.00 per part. Ornithologist and Oologist for '84, '86, '87, '88, '89 Smithsonian Reports for '72 and '73, Last Volume of Century, Six odd numbers of Atlantic Monthly, Skull or Badger, Buffalo Teeth and a few first-class Eggs in sets, for back numbers of the Auk or first-class Eggs in sets. Address at once, EDWARD P. CARLTON, Wauwatosa, Wis.

TO EXCHANGE.—A new B flat Cornet, nickel plated with a B flat shank, with case, instructor, etc., value, \$20; for the best offer of Bird Eggs. Mounted Birds or Taxidermist's supplies. Correspondence solicited. H. D. WILBER, E. Constable, N. Y.

1-1 Golden Eagle Egg with data, nicely marked and side-blown, but slightly cracked at the larger end, is tight together however and crack hardly shows. Make offer, C. TURTON, Box 556, Los Angeles, Cal.

WANTED.—Books and Magazines relating to Ornithology or Oology for which I will exchange first-class Birds' Eggs, in sets, with data. F. L. FARLEY, St. Thomas, Ont.

WANTED.—To exchange 50 varieties of first-class Birds' Eggs for the best offer of Stamps; also would like to buy a collection of Stamps for cash or exchange. Send 2 cents for my approval sheet at 30 per cent commission and receive 20 stamps free. All letters answered. GEO. A. FREEMAN, Box 174, Natick, Mass.

TO EXCHANGE.—The following singles, A. O. U. Nos.: 538, 612, 506, 444, 447, 616, 511b, 500, 498, 501b, 703, 214, 604, 704, 633, 581, 581c, 563; E. S., 443, 721, 721b, 598, 683, 593, 622a, 587, 495 and 552a, for Eggs in sets, with complete data. Send 50c lists and receive mine. H. A. HESS, Box 14, Elmhurst, Ind.

## EXCHANGES.—Continued

Have you read Lattin's "Exchange Extraordinary" in this Oologist?

RUBBER Hand Stamps, full and explicit directions for making your own, cheap, for 30 cents worth of first-class Eggs; have a variety of articles to exchange for Eggs; also Eggs to exchange. Please send lists of what you have to exchange. C. H. PRINCE, Danielsonville, Conn.

TO EXCHANGE.—Dove's Tales and Pickwick Papers; for Handbook of the Agassiz Ass'n; "Three in Norway" and "Up the Rhine," for Dove's Key, set of 4 Wilson's Thrush Eggs for a good pair of Emory's Scissors. STUART K. LIPTON, Clarksville, Tenn.

EXCHANGE.—Mazon Creek Fossils in Iron stone, Noddies, Ferns and Plants for Marine Shells, Starfish and corals. Wishes fine Indian Relics, Minerals and Fossils in quantity. Wishes to correspond with parties who have large collections for sale or exchange. I wish large, slowy specimens for my exhibit at the coming World's Fair at Chicago. H. D. HILL, Morris, Ill. a3

For \$1.00 worth of first-class Eggs or specimens we will give the Oologist for 1890. For 50 cents worth, a card good for one exchange notice in the Oologist; for 25 cents a card good for inserting name one time in Directory, or for \$2.00 worth of best desirable ones, we will give a copy of Maynard's Birds of Eastern North America (publisher's price for this work is \$18.00, cash). Send in your lists of duplicates should you desire to exchange for any of the above. THE OOLOGIST, Albion, N. Y.

NOTICE—I have the following eggs and supplies for sale or exchange: Nos. 12 $\frac{1}{2}$ , 22 1-5, 56 $\frac{1}{2}$ , 114 $\frac{1}{2}$ , 151 $\frac{1}{2}$ , E. S. 3 $\frac{1}{2}$ , 154 $\frac{1}{2}$ , 2 4 1-6, 258 1-1, 263 1-5, 274 1-5, 282 1-5, 289 1-5, 400 $\frac{1}{2}$ , 585 1-1, 690 $\frac{1}{2}$ , 693 $\frac{1}{2}$ . All first-class sets with data. Also 1 complete set of Taxidermist's Tools in walnut case, 1 Drill, 1 Blowpipe, Data Blanks, 1 3-inch Steel Rule divided into 100ths, fit into slide, for measuring eggs, and Dove's latest Key to Nests and Eggs of N. A. Birds, paper bound. All valued at over \$12.00; will exchange for Type-writer, Flobert Rifle, Violin, Banjo or Guitar, or will sell for \$7.00 cash. Address, C. MORROW, 1270 Michigan Ave., Columbus, O.

## BIRDS' EGGS.

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H. H. Abeel, 6 Delano St., Po'keepsie, N. Y.  
O. E. Crooker, 621 Francis St., Madison, Wis. a3  
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Alfred Guglielmetti, Petaluma, Sonoma Co., Calif.  
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Pub. THE OOLOGIST - - - ALBION, N. Y.

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**FRANK H. LATTIN,** : : : **ALBION, N. Y.**

# THE OOLOGIST.

VOL. VII.

ALBION N. Y., JUNE, 1890.

No. 6

## Notes on the Nesting Habits of the American Oystercatcher.

My opportunities for observing this bird have been somewhat limited, but so little seems to have been recorded concerning the nidification of this species that I write the following in the hope of inducing others having greater experience to supply more complete information.

In June, '88 my friend, E. B. Coues, and myself made a collecting trip of about two weeks to Cobb's Island, Va. and it was during this time that the following notes were taken.

From what we had heard and read before starting, we had hardly expected to find *Henotopus* breeding on the island, for, although once an abundant species, they have become comparatively rare and I do not think that over a dozen pairs can be counted in a season. This diminution has resulted from several causes, chief among which is the continued persecution to which the birds are subjected during the nesting season by the islanders, the eggs being taken on all occasions, as they are said to possess a more delicate flavor than those of any other species, but it is needless to say we did not attempt to confirm this statement by eating any. Besides this, many eggs must have been destroyed by the cattle which roam over the island, although the Willets and Clapper Rails are the greatest sufferers in this case, as they nest in the grass where the animals feed and we found many crushed and broken eggs.

Inquiries on the island merely confirmed what we had heard before, i. e.,—that the Sea Crow (as the bird is called by the natives) was rapidly becoming a thing of the past and, up to the third day of our stay, we had not so much as seen a specimen, although we had col-

lected skins and eggs of nearly every other species breeding in the vicinity. That day (the 18th) however, as we were walking through the thick grass just above high-water mark, collecting eggs of the Willets and Rails, which are breeding abundantly, we suddenly caught sight of a large dark bird running out on the wet sand after each receding wave and the red bill and thick, plover-like form quickly dispel all doubt as to his identity; but now he sees us too and, with a few shrill pipes to his mate, who has been hidden from view by a clump of grass, the two make off with short, rapid strokes of their black and white wings. Marking the spot from which they rise, we hurry forward, but alas! an empty hollow scratched in the sand is all that rewards our patient search, while a man's footprints close to the nest tell the rest of the fatal story.

This is disappointing, but we determine to be revenged on the birds anyway. They have alighted on the beach near by and now stand watching us and bobbing their heads in a comical fashion, evidently not quite decided whether to fly on farther or not, but we quickly settle the matter by coming within range and knocking over the nearest one with a charge of fives.

A few hours later, however, we are more fortunate. While exploring a large colony of Black Skimmers, we are pleased to see some half dozen Oystercatchers in a sociable little clump and a few minutes later, accidentally discover a nest with two fresh eggs. They are dropped in a slight hollow in the dry white sand, no lining whatever being used, a hollow, in fact, similar in every respect to those made by the Skimmers which surround us on every side.

During the next few days we succeeded in taking three more sets of eggs, two of two eggs each and one of three. One of these sets comes from Hog Island, the other two from the Skimmer colony visited on the 18th, the set containing three eggs being found within a few yards of the first nest.

All the eggs were fresh in spite of the late date, the set-back being due to the depredations of the eggers, a party of whom had pitched a camp near the Skimmer colony and were robbing the nests daily, and a clean sweep they made too, for, although we went over the ground carefully, we could find no more than one or two eggs in a nest.

Although three was our largest set, we were informed by Capt. C. H. Crumb, of the Life Saving Station, and a thorough ornithologist, that he had collected a number of sets of four during the past few years and, in his opinion, full sets of the first laying usually consist of three or four eggs.

In hunting for the nest we at first tried following up the birds' tracks, but they crossed and recrossed each other in such confusion that we soon gave it up and trusted to luck. Watching the parents would seem equally futile, for, like most species laying on the open sand, these birds leave their nest uncovered during the greater part of the day, trusting to the sun's warmth to incubate the eggs, a duty for which the scorching rays are amply competent and, as we tramped over the burning sand, we only wondered that the eggs were not baked on the spot.

This spring we hope to pay a longer visit to the haunts of the Sea Crow, when, possibly, a more thorough search may add somewhat to our knowledge of the habits of this interesting, if somewhat eccentric, character.

THEODORE W. RICHARDS.

Washington, D. C.

### The Prairie Horned Lark.

#### SETS OF FIVE EGGS.

Mr. Ernest Short, in the February number of the OOLOGIST, asks if any of its readers have ever found a nest of the Prairie Horned Lark containing five eggs.

I would like to state that I found a nest containing five eggs on May 28, 1889. From appearances I thought that she had been sitting some time. I didn't disturb the nest or eggs.

Close to the mother bird, who was sitting on the nest, were four young birds, which were, without a doubt, her first brood, for they flew away with her when I disturbed her.

Did any of the OOLOGIST's readers ever notice anything like that?

GEORGE L. WHITE,  
Livingston Co., N. Y.

[A set of five eggs of the Prairie Horned Lark was taken in June, 1888, by Ezra J. Botsford, of Medina. Also see description of set No. 1 by E. G. Tabor, below.—Assoc. Ed.]

#### IN CAYUGA COUNTY.

In answer to an article on the above named bird by Ernest Short, of Monroe county, N. Y., allow me to say I have found three nests of this bird as follows:

Nest No. 1, contained five fresh eggs. Nest on ground at the foot of a growing hill of corn; made of grass, roots and lined with dry grass blades. Found while cultivating corn. Had three eggs in at time of finding. Nest and eggs taken June 14, 1886.

Nest No. 2, contained three eggs. Incubation one-third advanced. Laid by same bird as No. 1, in neighbor's corn field across the road from ours, where No. 1 was found. Nest and situation the same as before. Date of collection July 3, 1886.

Nest No. 3, contained three young, nearly ready to leave the nest, which was placed in a meadow and was found

by watching the parent birds carry food to their young. Found in the same field as No. 2. Date, May 23, 1889.

## ORLEANS COUNTY ALSO.

Several nests of this bird have been found in Orleans county and among others a set of two eggs taken by E. J. Botsford, of Medina, on March 19, last.

Aside from the earliness of the date, this set is peculiar in the markings of the eggs, and perhaps a description of them will be of interest.

The markings of this set appear more distinct than is usually the case and are of a darker shade. Egg No. 1 is evenly spotted over the entire surface, while egg No. 2 is a rarity. Nearly all of its spots are concentrated near the great end, forming a very dark wreath of greenish-brown thereabout. Aside from the wreath the markings are very sparse and each end of the egg displays the grayish-white background, free and unmarked. This egg also has the imperfect pencilings of black near the large end, common to the eggs of this species, while egg No. 1 has no such markings of black.

The eggs of this set measure respectively, .84 x .65 and .84 x .63.

N. F. P.

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### The Saw-whet or Acadian Screech Owl.

The Saw-whet Owl (*Nyctala acadica*), or Acadian Screech Owl, as it is commonly called, is the smallest member of the Owl family in Eastern North America, and is considered quite rare in the District of Columbia four only being taken by the following gentlemen, respectively: The first by Mr. Fredrick Webester, the well-known taxidermist, the second by the Smithsonian Institution, the third by Mr. A. E. Colburn, and the fourth by myself which I took a short time after the one taken by Mr. Colburn. I give the following measurements, etc., from my skin. (Date, Dec. 31, 1889. Locality,

Ivy City, D. C.; Sex., female; Length 7½ in.; Wing, 16¼ in.; Tail, 8 in.) The following from Dr. Thomas M. Brewer's American Oology gives the Habitat, etc., as follows: "North to New Calendonia, Dr. Townsend observed it in Oregon; Dr. Cambell in California; Mr. Audubon in Kentucky and Louisiana; Wilson in New Jersey; McCueh in Nova Scotia and Dr. Hoy in Wisconsin." "Mr. Brewer further states that he has taken eggs in northern Ohio and observed the bird in various parts of New England." As to their nesting he says: "The Acadian Owls rear their young in the hollow of trees often only a few feet from the ground, in the deserted nests of other birds, in crevices of rocks and according to Wilson occasionally construct nests for themselves among thick pine trees. The eggs are of a bright clear white and more like a woodpecker's than an owl's in their crystalline clearness; a specimen from northern Ohio measures 1 2-16 x 14-16."

W. ALLISON MILLER.

Washington, D. C.

[A set of five eggs of this species in our possession—taken at Elk River, Minn—does not show the polished or glossy surface—so characteristic in the Woodpeckers and some Owls. These specimens are, however, the purest of white with a surface rather inclined to be rough, but not polished or glossy, and except in size, resemble, exactly, clean specimens of the Elf Owl.—ED.]

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### Pine Warbler.

Three miles towards the south from this city, lies a large patch of woods rapidly disappearing before the yearly onslaughts of the woodsman's axe. Around it are the cultivated fields and the partly cleared wood-lots of the farmers; within its confines all is changed. Here one could easily imagine that the primeval forests had suddenly arisen on their old-time sites. The immense pines reach so far towards the

heavens that their melancholy roar is softened by distance into an enchanting murmur and the "caw" of the crow, balancing on the topmost spear, loses its harshness and blends well with the melody of the Winter Wren here below. Under foot, the soft needles give a springing elastic sensation to the footsteps, and their racy odor tempts one to breathe deep and long. Farther on, in the dry maple woods, an old sugar house long since deserted, has become the haunt of numerous noisy Chickadees, while the swamp beyond gives promise of Warblers by-and-by. On escaping thither from the busy country road outside, one is tempted to exclaim with Longfellow

"This is the forest primeval:  
The murmuring pines and the hemlocks,  
Bearded with moss and in garments green,  
Stand like a ridge of E'd."

It is the middle of April and on first entering this sylvan retreat, I am saluted by the ever-pleasing song of the Ruby-crowned Kinglet; instantly I become absorbed in a vain attempt to transpose it to paper. Even while my interest is thus centered I am conscious of *vireo* like trill near by and after the Kinglet has discovered me and has changed his tune into angry chattering, I turn my attention to it. This trill I notice is of the same pitch throughout, but first increases then decreases in power.

By the aid of a powerful field glass, I can make out the form of a little bird up a monster pine and by his motions I recognize him as the Pine-creeping Warbler. Walking carefully along, watching the ground very intently, lest I should step on a stray twig, I at last reached the foot of the tree, and straightening up prepare to shoot, when I discover he is not there. At this moment the trill sounds again but this time farther along and on repeating the operation I am again fooled. This continues until the distant twelve o'clock whistle warns me and I am just

about to start for home when two birds flutter to the ground fighting savagely. So rapid are their motions that I cannot distinguish them, but ere long one gains the advantage and his defeated rival seeks safety in flight.

The victor, his breast swelling with pride, mounts a small bush and begins the well-known trill; it is never finished however, and his lifeless form soon reposes in my hand.

Next day, the April "cold snap" arrives and the sky is well overcast with clouds so I determine to see how my bird friends stand the weather. I again find the Pine Creepers, but how changed their habits; they have descended from their airy bowers and now inhabit the deciduous trees of the swamp. One can easily observe their habits now and see how appropriate the name of creeper is, for apparently their best hunting grounds are the trunks of the trees, although numbers may be seen hunting among the twigs with all the diligence, if not quite the speed and dexterity of other Warblers.

As the season advances the males develop a greater variety of notes; sometimes they end their trill with four clear whistles, sometimes they utter four pairs of notes, the first of each pair the low, followed by the four whistles.

They are now found everywhere; the pine woods are full of them as a matter of course, and they may often be found in small patches of oak a mile or so from the nearest pine. In the fall they change their plumage and have the habits of the Bush-warblers. Their appearance is so like that of the Black Poll and Bay-breasted Warblers (full plumage of course) that it is no wonder that they are not oftener observed in the fall.

STEWART E. WHITE,

Kent Co., Mich

### The Bluebird.

The Bluebird is about the second bird to make its appearance here in the spring, out of the many which annually assemble here at that season, the Robin being its immediate predecessor. The Bluebirds generally make their first appearance about the middle of March. They quickly form into pairs and diligently go to work at their respective nests. The nest is usually placed in a hollow post or a hole in a tree, being a neat cup-like depression composed entirely of grass. The eggs are usually five in number of a light blue color and entirely devoid of spots.

The plumage of both male and female is alike and is very pretty. The back, wings, tail and head are of bright blue, the feathers covering the breast being of a reddish-brown. Albino eggs of this bird are very rare here; I have never heard of but one set being taken. The nest was placed in a hole in a tree and contained four milk-white eggs, no two of which were of the same size. One was nearly one inch long and in shape resembled a Chimney Swift's egg. The others were near the ordinary size of the common Bluebird's egg. If a Bluebird which lays albino eggs be compared with one which does not, it will be found that the plumage of the former is of a much brighter blue than that of the latter. I know of no reason for this but I have observed it to be a fact.

The Bluebirds frequently select a curious place in which to construct their nest. Though they use holes in wood in preference to other places, they often build their nest in a place where no one would ever think of looking. I will record an instance of this kind which came under my notice several years ago.

I was out collecting one day, and after considerable strolling about found myself in a marshy hollow. A creek

ran through the little valley, which abounded with tall grass and weeds. Numerous willows also grew along the margin of the stream. One of these willows forked at about two feet from the ground and in the crotch lay an old rusty tin can. How it came there I have not the least idea. I now observed two Bluebirds sitting on a fence about two rods from the willow. It immediately came to my mind that there should be a nest near. I don't know what possessed me to do it, but the first place I looked was in the old tin can, and there sure enough was the nest with four half-grown young ones in it. I was somewhat disappointed by not finding the eggs, but anyway I learned something about the nesting of Bluebirds.

E. CARL LITSEY,  
Marion Co., Ky.

### The Great Crested Flycatcher.

One of the strangest and most grotesque of our American birds is the Great Crested Flycatcher, (*Myiarchus cinerascens* LINN. (ab.))

He is not only grotesque in his appearance but in all of his habits, and in everything connected with him.

They arrived in my vicinity this year May 2d, but as it is their custom to stay in a dense swamp for three or four weeks after their arrival, until the weather gets warm and settled, they have not yet, May 16 1890 begun to charm (?) us with their "music," soon however the woods will ring with their song, for they will soon leave the dense swamps for more open woods.

Mounting the topmost branch of a giant oak they pour forth their "song," and such a song! For loudness, harshness and wierd grotesqueness where can you find its equal? A stranger can well wonder how a bird can produce such a noise, and keep it up for hours at a time. In fact no one would think

a bird could make a noise like that, but rather some strange kind of tree frog. It was years before I could believe a bird could utter this strange cry, that I had been in the habit of hearing from four years of age. And its nest! Unlike most Flycatchers it nests in holes in trees, and stranger still often lines them with cast-off snake skins, and to keep up the harmony this strange bird places in this odd nest some very queerly marked eggs. Where can you find its equal for grotesqueness among our American birds?

WILFRED A. BROTHERTON.  
Oakland Co., Mich.

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**More Albinos.**  
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**SONG SPARROW.**

On the sixteenth of March my uncle told me of a white Song Sparrow that he had seen in his orchard. I became interested and went out immediately and vainly searched the orchard and truck-path for it. But on March 24th, as I was going by his place on my way to school, I saw it feeding, in company with Snowbirds, in front of his barn.

The next evening I found it in a little marsh on the place and was so successful as to kill it. I gave it to Professor Langille and he pronounced it a Song Sparrow.

Its head, breast and wings had the ordinary markings of a Song Sparrow, but its back was white. Its tail was very light, but some of the feathers were light brown.

HAROLD B. STABLER.  
Montgomery Co., Md.

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**JUNCO; FIELD SPARROW.**

The Junco is quite common in this locality and a short time ago I saw an albino.

A friend of mine and myself were hunting in the country a few miles from this place (Augusta, Ga.) and while walking across a grass field, flushed a

flock of Snowbirds, among which was this albino. My friend fired and brought him down and presented him to me.

It measured 6.13 x 9.45; wing, 3; tail, 2.75.

The bill and feet were pure white and the eyes red. It was pure white with the exception of a few of the secondary quills, three feathers of the tail and a few ashy blotches on the back and breast.

Mr. Geo. Butler, of this place, has a partial albino Field Sparrow.

E. E. N. MURPHY.  
Augusta, Ga.

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**BLACKBIRD.**

I have an albino Blackbird in my collection which was shot in March last. It was rather badly torn by shot, being minus a few feathers on one side of the neck, and his tail, but what the shot spared is preserved.

EUGENE EVANS,  
Larimer Co., Colo.

—◆◆◆—  
**A Day after Hawk's Eggs.**  
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We started April 22, 1889, well equipped with two breech-loading shot-guns and a pair of climbers.

When about two miles on our way we spied a nest; going up and striking the tree, we were surprised to see a female Broad-winged Hawk start off. We secured her and two eggs which were a dirty white, blotched and spotted with purplish brown.

We next took a set of five Crows. Then we found a nest of the Red-tailed Hawk with two eggs; next, in a large maple 40 feet high, eggs about 2.25 by 1.75 spotted fine with reddish brown and lilac.

We next took a set of four eggs of the Cooper's Hawk from a beech 80 feet high. The nest was composed of sticks being rather flat. We secured the female. The eggs were white, tinged



with blue and unspotted. Our last Hawk's nest was that of the Red-shouldered in an old hemlock about 60 feet high. It contained three eggs, two of which were dirty white, blotched with faint reddish brown chiefly at the larger end. The other was dirty white, very faintly marked with reddish-brown spots at the larger end; we shot the old bird. We also got two more Crow's nests, each containing five eggs.

M. AND C.,

Windsor Co., Vt.

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#### The Pileated Woodpecker in Mahoning Co., O.

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On May 10th, while a companion and myself were passing through a large piece of timber about one mile from Poland, this county, my companion had occasion to discharge his gun.

Immediately after the discharge, I noticed a female Pileated Woodpecker fly from the opposite side of a dead hickory near by.

After further investigation, I saw a hole in the stub of a large limb about fifty feet up, and chips at foot of tree.

As I had no climbers, I concluded to attempt to climb the tree without, although there was not a single limb between the ground and the excavation.

I had reached a height of about thirty feet, when I concluded that I was unequal to the task and reluctantly descended to the ground.

After looking at the hole for some time, I noticed a small beech standing about ten feet from the hickory reaching to, and beyond the excavation.

I ascended this and after remaining perched for some time looking wistfully at the nest, which, although so near was yet so far, I cut a limb with a hook on the end and found that by hooking this around a limb on the hickory and pulling with both hands, I could bend the beech over until I could

nearly reach the nest, but this was of no avail as my hands were both in use.

I finally concluded to borrow a rope which I did, and after fastening one end to the hickory, I wrapped the other end around a limb on the beech, and after considerable difficulty, succeeded in pulling it over until it touched the hickory.

After working for some time with a knife, I succeeded in reaching the bottom of the excavation and to my great disgust withdrew an egg with the head and bill of a bird protruding. I returned this and found that the nest contained one bird just out and another egg which was bad—not rotten, but one of those instances in which the contents remain clear, and comparatively inoffensive to the smell.

It is a fairly good specimen, pure glossy white and measures about 1.30 x .35.

The excavation was 18 inches in depth and between 4 and 5 inches in diameter at the entrance.

The eggs were placed on chips at the bottom of the excavation.

This bird is very rare here, many persons never having seen one.

If any other person has taken eggs of this species in this county would like to hear from them.

W. H. OLNEY,

Mahoning Co., Ohio.

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#### A Shower of Birds.

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There was a great destruction of birds in Cedar Rapids Saturday night, May 17th, between 9 and 10 o'clock.

There was a severe rain-storm, during which the birds came down in hundreds. Most of them were birds that do not nest around here and are not at all common.

Several taxidermists who reside in the city succeeded in getting a fine lot of specimens.

Some of the birds were merely stunned and when caught and put in cages, soon revived—others were killed outright.

The names of the birds as far as known were Olive-backed, Russet-backed and Golden-crowned Thrushes, Cat-birds, Bobolinks; eight varieties of Warblers, Golden Plovers, Rose-breasted Grosbeaks, Scarlet Tanagers, Yellow-crowned Sparrows, Grinnell's Water Thrush, Yellow-headed and Red-winged Blackbirds, Hepatic Tanagers and American Redstarts.

The cause of this shower of birds was that they were probably migrating during the night, when the storm struck them and beat them to the earth. Those that died were killed by coming in contact with the electric light and telegraph wires.

There was a similar shower of birds about six years ago.

BERT H. BAILEY,  
Cedar Rapids, Ia.

#### Belligerent Neighbors.

During the year of 1882, it was my good fortune to spend the summer in the country, with very little to do, but amuse myself. Consequently I saw a great deal of bird life, for I literally lived out of doors, making pets of all the feathered families on the farm.

Among my most intimate friends were a pair of Chipping Sparrows and a pair of House Wrens, who came as regularly as clock-work for their morning allowance of crumbs. The Wrens seemed to be in great distress. They could find no place that appeared to suit their fancy for a home. To relieve them, I took a gourd, and cutting a small hole in one side, emptied the seeds out and placed it in the fork of a large cedar tree that stood but a few feet from a veranda, where I spent a good part of my time. I thought I would thus have a good opportunity to watch them in their domestic cares.

They took immediate possession, but trouble was in store for all my pets. The Sparrows had evidently chosen a limb on which to place their nest, about two feet and a half from where I had put the gourd, and both pairs began building on the same day. They were no longer friends, but enemies of the bitterest kind. From that hour on there was a continual warfare—not a war of words by any means, but long and hard-fought battles; the feathers often flying in great numbers. After a battle the Wrens would perch defiantly on their domicile, and the Sparrows as resolutely on their chosen limb, neither pair willing to yield a single inch. Each pair finished their home and when the eggs were deposited the females began the work of incubation while their partners took the position of guards. Many and hard were the battles fought, but each little warrior stood resolutely at his post with a fidelity that is well worth copying.

When the young birds were hatched they kept up their war for a few days, and then something stranger still took place; they very suddenly became the best of friends. The Wrens would feed the Sparrows and the Sparrows would then return the favor. I never heard an angry word between them from that time on, each assisting in the task of gathering food until both families were ready to move out. The Sparrows left as soon as the young could fly, and that was the last I ever saw of them. The Wrens stayed, however, and were soon preparing to rear another brood, but trouble of a more serious nature was in store for them this time. I noticed some very suspicious looking scratches on the tree, as though some prowling old cat had been trying to get my little friends. Not knowing what to do, I consequently did nothing, but would go every morning as soon as I was up to see if my little pets were safe.

One morning when the young birds were only two or three days old, I came down to find my worst fears realized. One of the parent birds had been killed and the gourd turned over, but the little ones were uninjured. The remaining parent sat disconsolately on a limb near by for a while, but the pitiful cries in the nest soon aroused it to a sense of the responsibility that rested upon it. So it set heroically to work to care for the half famished nestlings within.

This was too much for me to endure (for I hate a cat at best) and I determined to have revenge. I waited patiently until after dark, and the family had gathered in the house so I would not be observed. I covered the gourd with mosquito bar, took it down carefully and hung it in an unoccupied room in the house. Then I placed a stout steel trap in the place where the nest had been and was rewarded next morning by finding a big cat in the trap. A member of the family that was always first up in the mornings agreed to dispose of the cats for me so I set the trap each night and succeeded in catching three. I still took the nest in every night until the birds were old enough to fly. When I would put them out in the morning and take off the cover the old bird would hop out and, perching scarcely a foot from my hand, would warble out its morning song as though thanking me for my care.

I would like to hear from some of the readers of THE OOLOGIST if they have ever met with an incident like this of the Sparrows and the Wrens. Doubtless what I thought a very odd freak of nature, is something not so strange after all.

LILLIE I. CONLEY,  
Wayne Co., Ind.

### Our Question Box.

Queries to be answered in these columns should be written on a postal or slip of paper—never mix them in your letter when writing about other matters.

T. M. B., Natchez, Miss.—The eggs of the Hermit Thrush are greenish-blue, unspotted and average about .86 x .65 and closely resemble those of the Wilson's Thrush.

M. S. H., Portland, Mich.—1. The American Peregrine Falcon or Duck Hawk is frequently called the "Bullet Hawk."

2. Will not the answer to "B. S. B.'s" query in the May OOLOGIST apply as well in Michigan as in New York State?

C. T., Los Angeles, Cal.—The original data should *always* accompany the set.

H. C. H., Cincinnati, N. Y.—The Prairie Horned Lark (*O. a. praticola*) is not an uncommon breeder in the lake counties of Western New York. The true *alpestris* (*Otocoris alpestris*,—Horned Lark) breeds in Labrador and those upper regions and may be a winter visitant to this section. It does not breed in New York.

G. B. E., Kansas City, Mo.—Your gregarious birds having a light-brown topknot, strip of black about the eye, yellowish-white breast, lavender rump, tips of secondaries, red and tail feathers tipped with yellow; are Cedar Waxwings.

W. M., Charlie Hope, Va.—Your "lead-colored bird, with a black throat and white breast," nesting in a hole in a dead stump, whose eggs are six in number, small and white with brown specks; is the White-breasted Nuthatch.

Name mislaid.—The Belted Kingfisher nests in this locality from the 20th of May into June. The Woodpeckers nest about the same time.

A. O., Brocton, N. Y.—Your sand is garnet sand. The shells which you call pennywinkles (periwinkles?) are doubtless *Littorinus*.

R. H. B., Claremont, N. H.—Is not the egg you describe, a runt egg of the Cliff Swallow? It resembles a Cliff

Swallow's in everything but size. (judging from your description.)

A. L. T., Newark, N. Y.—We know of no hawk that is nearly all white whose eggs are greenish-white unspotted.

G. E. B., Marion, Ala.—Your "Butcher-bird" is one of the Shrikes, probably the Loggerhead. Your "Swamp mockingbird" we think from your description must be the Towhee.

P. C., Wilmington, Del.—The following owls probably breed in your locality, viz.: The Barn, Saw-whet or Acadian, Screech, Great-Horned, Short-eared, Long-eared and Barred.

A. H., New Dorp, N. Y.—The answer to W. I. C. in the May "query column" applies *verbatim* to your case.

A. W. C., Tecumseh, Mich.—The Red-tailed Hawk begins to set about April 1st. Incubation lasts about three weeks. Your one egg constitutes a set if you are satisfied that the bird had finished laying. The eggs are laid at intervals of a few days. Cannot say as to the bird that migrates with the Oriole.

R. H. D., Stuart, Ia. asks the following question: "What bird is it that builds on the beams of bridges, lays a blue egg, and is about the size and color of a Robin? The nest is built of sticks and grass." We don't know if it isn't a Robin. Who does?

J. F. H., Mendota, Ills.—Cannot place your nest and eggs without a description of the bird.

L. S. M., Gregory.—1. Your bird called "Chippy" which lays blue eggs spotted with black is the Chipping Sparrow.

2. Your description is insufficient.

H. H. R., Middle Granville, N. Y.—Although we have always heard the name "Shitepoke" applied to the American Bittern, P. G. B. of Haverhill, Mass., informs us that in his locality, this name is applied to the Great Blue Heron. He says that there is an island near Haverhill where the Great Blue Heron breeds, which is called "Shitepoke Island."

A. T., Newark, N. Y.—Your egg is an egg of the Oven-bird or Golden-crowned Thrush.

C. H., Oregonia, Ohio.—The Vesper Sparrow or Grass Finch nests on the ground and has two white feathers in the tail, most noticeable when flying.

H. A. H., Edinburgh, Ind.—We have generally heard the name "Shitepoke" applied to the American Bittern and although a correspondent at Haverhill, Mass., informs us that in that locality, it is applied to the Great Blue Heron, yet the nest and eggs you describe as belonging to the "Shitepoke," are, by your description, very like those of the Green Heron.

J. H. L., Hamilton, Ont.—The number of eggs in a clutch of the Cowbird is not definitely known, although observations in regard to this matter have been had, that approach accuracy. For instance, in one case a Cowbird kept in captivity, laid four eggs.

D. F. R., Himrods, N. Y.—1. The description of the nest and eggs belonging to the sparrow with a white tail, is like that of the Vesper Sparrow or Grass Finch.

2. Your description is hardly sufficient. The eggs of the Song Sparrow vary considerably in color and markings.

L. F. N.—Would like to know what bird it is about the size of a Crow or a little larger that frequents ponds, streams and other bodies of water, the general color of whose upper parts is greenish-brown and whose tail is tipped with bright scarlet. Who will relieve him?

H. J. C., Elba, N. Y.—1. Your bird about the size of a sparrow, of a slate color on the head, back, wings, tail and part way down the breast, the rest of the under parts being whitish, and having two white feathers in each side of the tail; is the Slate-colored Junco or Black Snowbird.

2. See another column of this issue.

3. Your small bird of a uniform yellow or yellowish-brown color, building a nest similar to that of the goldfinch in a bush near a house, the eggs being of a pearly white spotted with various

shades of reddish-brown and occasionally a spot of black, is probably the Yellow Warbler.

B. S. B., Phelps, N. Y.—1. The nesting of the Red and White-shouldered Blackbird or Tri-color Blackbird of the Pacific coast, is similar to that of the Red-Winged, the nest being placed in flags or alder-bushes near water.

2. Your sparrow of a general brownish color and patch of chestnut on the head, building a nest of hair in a bush, and laying blue eggs spotted lightly at the large end with brown is doubtless the Chipping Sparrow. Early nests of this species are often placed on or near the ground.

3. The nests and eggs of the different Plovers closely resemble each other as do the birds themselves. The Killdeer may be known from all other Plovers by the two black bands on throat and breast, and by its cinnamon-colored rump.

A. P. B., La Moille, Ia.—Your bird building its nest under a bridge or in an old barn, whose eggs are white spotted sparingly at the large end with brown, is the Phoebe.

NOTE.—Queries not noticed in this issue will be answered in the next number.

#### Our Monthly Mixture.

H. F. M., Quechee, Vt. reports having shot a Mockingbird at that place on April 30th, last.

Ernest H. Short, Chili, N. Y. relates the taking of an egg of the Prairie Horned Lark which measured 1.01 x .79, an unusually large egg for that species.

On May 6th, Allie Hutchinson, of Gaines, N. Y. found a nest of the Song Sparrow placed in a cavity of an apple tree, ten feet from the ground.

Letson Balliett, of Des Moines, Ia. reports a nest of the Great Horned Owl, the contents of which were wonderfully graded in size and incubation. First was a young Owl. Then five eggs, which, in incubation varied uniformly from highly incubated to perfectly fresh. Also there was a perfect

gradation in size, the most highly incubated egg being the largest, and the fresh one being the smallest, while the size of the others varied directly as the stage of incubation.

Charles C. Trembly, of Utica, N. Y., writes: "Have just received, from Mr. H. L. Callaway, of Orion, Ill., a set of nine (9) eggs of the American Crow, collected April 7th of this year. The eggs present no great variation in size, or color. Sets of six are not unusual, but I should call nine either a very large, or an "assisted" set; by which I mean that the nest was probably occupied by two pair of Crows."

We clip the following from a Mayville, N. Y. paper:

"Almon E. Kibbe, Taxidermist, of this village, has just completed the mounting of a Florida alligator, for Mr. Frank H. Lattin, of Albion, N. Y., which will be on exhibition at Chautauqua, during the coming summer. The reptile measures a trifle over eleven feet in length and must have been anything but a pleasant neighbor in its native slough in the land of flowers."

Frank Viele, of Ballston Springs, N. Y. relates an extraordinary occurrence in connection with a Robin. He writes: "On May 2nd, while out collecting, I saw a curious sight. A Robin had built her nest in a tree near a Crow's nest, and the Crows bothered her so that she built a nest about twenty rods from the old one, and I saw her carry the four eggs in her claws to the other nest."

Homer J. Knickerbocker, of Elba, N. Y. writes:

"May 3rd, I shot a bird, whose back, head, wings and tail were olive color or yellowish green, with a small tuft of reddish yellow feathers on the back of its head. The throat was white, streaked with black not unlike a Meadowlark's. The breast and belly were white; the bill was about three-fourths of an inch long and closely resembled a Woodpecker's. Shot it in the act of singing. If this is an Olive-backed Thrush, please give me credit for finding two nests last year. The nests were in small saplings, about seven feet up, composed of small twigs, shreds of bark, etc. Length of nest,

about four and one-half inches; breadth, three and three-fourths inches; depth, two inches. Eggs, four in number, greenish-blue, speckled with reddish-brown and lilac gray—size, about .90 x .65."

[Although the breeding of the Olive-backed Thrush is one of the rarest occurrences in this locality, who will say that the above accurate descriptions are not coincident with that Thrush?—Assoc. Ed.]

F. W. Cook, of Minneapolis, Minn., reports the capture of a King Rail in Hennepin Co., on the 27th of April; a rather northern locality for that bird. It was a female in the best of plumage.

Victor Allee, Paola, Kansas writes us of a "red-bird" (cardinal) nesting in some vines in a porch. He secured a set of eggs from the nest and wishes to know if it is not uncommon for them to nest so near habitations.

Evening Grosbeaks were not uncommon in Western New York during the past winter. One or more specimens were taken by each of the following gentlemen: George Guelf, Brockport; R. Wilkins, Albion; John Rittenburg, Gaines.

L. A. Dockerey, Clinton, Miss., writes us that he has taken thirty-two eggs of the Broad-winged and Florida Red-shouldered Hawks this year between the dates of February 25th and March 10th. He also found two nests of the Carrion Crow, and a nest of the Meadowlark which contained two eggs of the Lark and one of the Bob-White. Two of the Meadowlark's eggs had been rolled out, and one broken by the Bob-White, as he inferred.

Glenn Levings, Potsdam, N. Y., found a nest of the Red-shouldered Hawk last spring containing six eggs, a very large set.

#### PROTECTION.

Having read Mr. Leslie's article on "Bird Protection" in the May OOLOGIST, I fully agree with him in the matter. I am but a boy collector, but I try to study birds, eggs and nests scientifi-

cally. I think that if such a society as he mentions should be formed, our "native birds" would increase instead of diminish in numbers. I also think that a game law such as he mentions should be made and enforced, and that every officer to whom a certain district is given should know all the scientific collectors of that district. I think that if we, who are studying scientifically, could get up such a society as mentioned, it would in a great measure stop "nest robbing." Let us hear from more on this important subject.

HOWARD G. PHELPS,  
Cazenovia, N. Y.

#### NESTING EXCAVATIONS USED MORE THAN ONCE.

In reply to the query of P. H. H. in last OOLOGIST, I would say that I know of instances where the Flicker and Bluebird have had their nests in the same tree for three successive years, raising two broods each year.

H. F. M.,  
Quechee, Vt.

No queries or articles reaching us later than the 20th of the month, can expect to receive attention in the following issue.

#### Another Handy Contrivance.

Seeing articles now and then on different methods of collecting eggs, I thought I might add something that would be new to some of the readers, viz.:

I have a light pole fifteen feet long, made of cedar, with an attachment on the extreme end for holding a small hand mirror and with this, one can look into the majority of nests without going to the trouble of climbing the tree to see if the set of eggs is complete or not.

I have used this very successfully during seasons '88 and '89 and intend to do so this coming season.

CLYDE L. KELLER,  
Marion Co., Oregon.

# THE OÖLOGIST

A MONTHLY MAGAZINE DEVOTED TO  
ORNITHOLOGY AND OÖLOGY.

**FRANK H. LATTIN, ALBION, N. Y.**

EDITOR AND PUBLISHER.

**NEIL F. POSSON, MEDINA, N. Y.**

ASSOCIATE EDITOR.

Correspondence and items of interest to the student of Birds, their Nests and Eggs, solicited from all.

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ALBION, Orleans Co., N. Y.**

\*.\* Articles, Items of Interest and Queries for publication should be forwarded as early in the month as possible and can be mailed to either the Publisher or the Associate Editor, as you may prefer.

ENTERED AT THE POST OFFICE AT ALBION, N. Y., AS SECOND-CLASS MATTER.

## Editorial Notes.

We are in receipt of a leaflet explanatory of a proposed trip to Mount Whitney, the highest peak of the United States. It is proposed to organize a party to spend the summer vacation in visiting the mountain and making a scientific study of it and the adjacent country as regards Ornithology, Botany, Geology, Mineralogy, etc., and to make collections, which study will be under the guidance of competent instructors. Prof. Charles Hitchcock, of Dartmouth College, one of the most eminent geologists of the country, is expected to be with the party. The cost of the proposed trip is placed at \$100 per individual. Those desiring to join the class, should address Rev. F. H. Wales, Principal San Joaquin Valley Polytechnic Institute, Tulare City, California.

As enthusiastic a recommendation as the OÖLOGIST has received in some time comes to us from one of our correspondents. After vividly portraying, in a sad manner, the ignorance and rapacity of some "young collectors" in his locality, he exclaims with energy: "Young collectors, thrown down your pins, and shake five cents out of your bank and send it for a copy of the OÖLOGIST which will tell you how to heartily enjoy and profit by egg collecting."

The number of queries received monthly are continually on the increase. It is true that the 19th century is an era of interrogation points. Send them along.

In the article on the Chinese or Mongolian Pheasant in the May number, by a mistake of the Editor, that bird was given as occurring in Idaho. The writer of that article, Mr. McNamee, resides in Idaho, but all of his observations on the Mongolian Pheasant were made in Oregon, and he informs us that that bird is not found in Idaho.

We make haste to amend the error, which was in confounding the place of observation with the place of residence of the observer.

## Natural History Camp of the Worcester Natural History Society.

Unknown to many, although its fame is rapidly spreading in all directions, there exists, on the shores of Lake Quinsigamond, near Worcester, Mass., an institution, which, in originality, nature and scope of the work, and the object held in view, is one of the best and most worthy of imitation generally, that has been brought to our notice.

This is the Natural History Camp, established in 1885, by the Worcester Natural History Society.

It is a summer camp for boys, and a similar camp for girls has recently been instituted at Tower Hill, on the shores of the same lake and promises to be fully as successful as the Boy's Camp has been during the five years of its establishment.

The full plan and scope of the work may be obtained from the Prospectus, which we publish in this OÖLOGIST.

All who are at all interested in any of the branches of Natural History, will at

once see the true value and worth of such an institution, where one is able, at a very moderate price, to pursue his own loved study under the best of instructors, and in the fields and woods and by the waters of Lake Quinsigamond.

Natural History students, wherever they may be found, could very profitably spend their vacation; or, a part of it, at this delightful camp.

Or, if too far removed from this mother of Natural History Camps, why they not make an effort to establish similar institutions in their own respective localities, and by their own pretty lakes and streams? The project may seem large at the outset, but a scheme with such pleasure, education and profit behind it, cannot but meet with the greatest success.

We would like to see the plan of the Lake Quinsigamond Natural History Camp carried out in many places throughout the country. Is the result not worth the effort?

#### Recording the Number of Birds Observed. [From *The Auk*, Vol. VII, No. 2, April, 1890.]

In an interesting article in *The Auk* a year ago Mr. Witmer Stone speaks of the difficulty of estimating the number of birds in a given locality, and declares it "well-nigh impossible." Although this difficulty is, perhaps, not so great as it seems, yet it has been so generally recognized that almost all field observers seem to have accepted the case as hopeless, and to have contented themselves with entering a bird in their note-books, as well as in published lists, as 'abundant,' 'rare,' or 'rather common,' words of such pleasing indefiniteness that they seldom mean the same thing to two different observers, or to the same person in regard to different species. The result is that we have but the vaguest idea of the relative abundance of different birds or of the fluctuations of any one species in different years or from day to day through its period of migration.

To take a complete census—except perhaps during the breeding season—may be out of the question, but there is

no reason why an observer should not make his work exact as far as his opportunities and abilities permit,—*i. e.*, why he should not keep a record of the exact number of birds of each species met with each day. This of course would not represent the actual number present in any locality, for varying circumstances of length of time spent in the field, extent and nature of the country covered during the day, weather, etc., would considerably modify the results, but, by entering all these facts in the day's journal, and giving them due consideration in making subsequent comparisons of the figures obtained, results can be reached that if not exact, are at least an approach toward it, and of vastly more value than the record of a vague generalization based perhaps as much on some mere accident that has strongly impressed the imagination, as on any serious consideration of the facts observed.

This practice of keeping a careful count has been in use for the last few years among several ornithologists of my acquaintance, and it would seem worth while to urge its general adoption among field naturalists, if it were only to infuse a spirit of more scientific exactness into their field-work. Our way is to jot down in the field with pencil and paper—perhaps on the back of an old letter—every individual bird seen or heard. If birds are few, and one's memory good, it may be possible to do this all at the end of the day, but for most people, and in the height of the season, the best way is to stop every little while—in the inevitable pauses of waiting for some bird to show himself or to sing again—enter the species not already on the list, and mark against each name the number seen or heard since the last entry. Care must be taken to make due allowance for individuals already previously observed during the same day, in order



not to unduly swell the record by entering them over again. At the end of each day the results can be transferred to the permanent record. To some the work may seem an irksome slavery, hopelessly interfering with their enjoyment of the beauties of nature. But with a very little practice they will be surprised to see how easy it becomes, and how much more thoroughly they observe when they have an increased incentive to identify every bird and count the number in each flock.

To illustrate the system, I give a brief extract from the notes taken near Cambridge last season by Jonathan Dwight, Jr., and myself.

	May	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
<i>Amphisp. cedrorum</i>																			
<i>Vireo olivaceus</i>																			
<i>V. gilvus</i>		3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>V. flavifrons</i>		1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>V. noveboracensis</i>																			
<i>Mniotilta varia</i>		4	10	9	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1
<i>Helminth. chrysopora</i>		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
<i>H. ruficapilla</i>		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>(Composita. americana)</i>		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>Dendroica aestiva</i>		12	15	2	3	2	8	1	3	1	3	1	3	1	3	1	3	1	3
<i>D. ceruleocephala</i>		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>D. maculosa</i>		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>D. pensylvanica</i>		8	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>D. striata</i>		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>D. virens</i>		7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>D. nigricans</i>		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<i>D. discolor</i>		1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

As a matter of convenience we use for a permanent record pages on which the species likely to be met with are printed in systematic order down the left hand margin. These pages are

ruled both horizontally and vertically, and the vertical columns headed with the days of the month, so that a space is given for the entry of each species under each day. This greatly facilitates the making of the original entry, and upon subsequent reference to it the history of the occurrence and abundance of any species during the period of observation may be read at a glance.

When it happens to be impossible to make an exact count—as is sometimes the case with a large flock of birds—the fact of the number recorded being only an estimate can be indicated by attaching to the figures any arbitrary sign to suit the fancy of the observer. Similarly, signs and abbreviations can be used to indicate that a species was in flocks, was apparently migrating, was singing, etc. As a rule, however, such facts can be more profitably treated at greater length in the note-book proper.

Hoping that others may be induced to follow this plan, and so, with but little trouble, greatly increase the scientific value of their field-work.

C. F. BATCHELDER,  
Cambridge, Mass.

March 14, 1890.

BOOK REVIEW.

Any book reviewed in these columns can be obtained of the Publisher of the Oologist at prices quoted.

Birds through an Opera Glass. FLORENCE A. MERRIAM.

In Riverside Library for Young People. Illustrated. 16mo., 75 cents. Boston: Houghton, Mifflin & Co. 1890.

This work, written in a popular style, is one of the most entertaining and fascinating that has come to our notice.

The author assures her readers in the preface, that "the little book is no real lion" and that "they have nothing to fear." She says: "It is not an ornithological treatise. It has not even the lion's roar of technical terms and descriptions to warn them of raging dullness, but is a very gentle beast, and of a good conscience."

Preceding the work proper are a few

brief but pointed "Hints to Observers," all of which are so valuable that we cannot pick out any particular one to mention here. She especially advises the observer, that, in order to make his study of birds through an opera glass most successful, that he strive to render himself, as much as possible, a part of the landscape, by avoiding bright-colored clothing, by walking slowly and quietly, and by using the trees and foliage as places of concealment.

The work itself is a marvel in the portrayal of bird character, and this vivid portrayal of character is one of the most pleasing and striking features of the work.

To give an example, what words could portray to us more clearly the character of the Blue Jay than the words the author uses? She says: "The Blue Jay comes with a dash and a flourish. Unlike the Chickadee, whose prevailing tints match the winter sky, and whose gentle *day-day-day* chimes with the softly falling snows, the Blue Jay would wake the world up." And again: "What a good business man the Blue Jay would make? All his notions are like the unique loading up performance—time saving, decided, direct."

Another excellent feature of the work is the description given the songs of the birds. Illustrated by notation in many instances, and represented by appropriate words in others, they are all most strikingly suggestive of the original songs.

In reaching the appendix, we find that we are only half done, for here we find the birds treated of in the work, classed into families forming a very handy table of reference. Following this, the general family characteristics of birds are treated. Then follows some arbitrary classifications: First, birds found in certain localities, as about the house, or in thickets, or in woods. Second, classification as to size as compared with the robin. Third, as to colors, whether striking and bright or dull and plain. Fourth, as to songs. Fifth, as to peculiarities of flight. Sixth, as to those birds that have the habit of song flight. Seventh, as to marked habits. Eighth, birds that walk instead of hopping. Ninth, shape of bill adapted to food. Tenth, classed as to place of nesting; and eleventh, birds that are seen in flocks when not nesting.

And so we reach the index of the work which tells us where to find anything we want and concludes this highly entertaining, instructive and valuable work.

#### Up and Down the Brooks. MARY E. BAMFORD.

In Riverside Library for Young People. Illustrated. 16mo., 75 cents. Boston: Houghton, Mifflin & Co. 1890.

This work, also written in a popular style, makes the study of water insects most interesting and pleasing. The author relates in an easy way her collecting experiences "up and down the brooks" and tells us in a way that we may all understand, about these lively little water-folk.

She depicts the invincible small boy, in all his many and variegated phases, to an extent of reality, that brings the "young America" right before our eyes. She devotes a closing chapter to "Frogs, Boys, and other small Deer."

Taken as a whole, the work is a valuable one and should find a place in the library, not only of all who are interested in entomology, but also of all who enjoy an interesting and readable book.

#### Modern Science and Modern Thought, by S. SAING.

In two parts, being Nos. 117 and 118 of The Humboldt Library of Popular Science. 45 cents. New York. December, 1889.

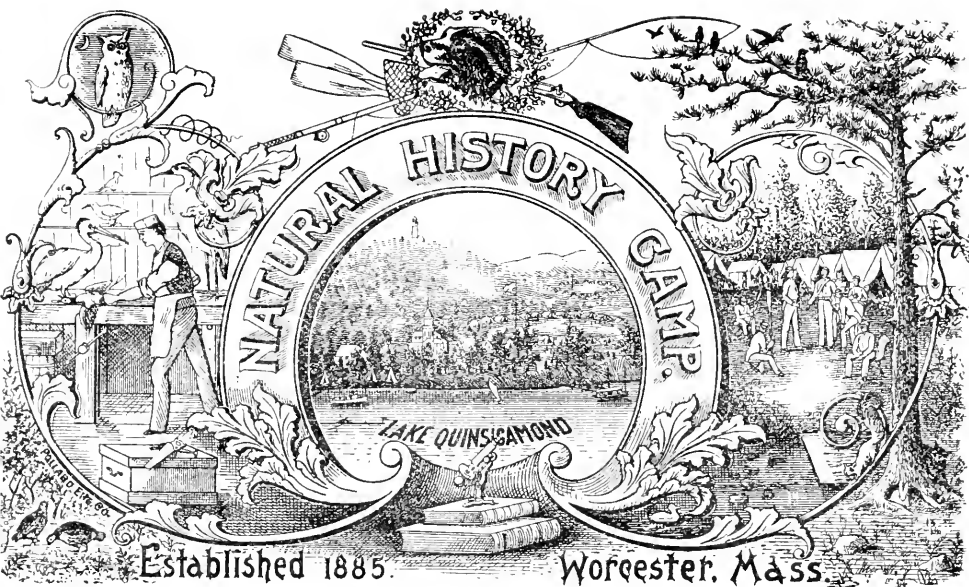
The object of the book is to "give a clear and concise view of the principal results of Modern Science, and of the revolution which they have effected in Modern Thought." The various chapters treat of Space, Time, Antiquity of Man, Miracles, Christianity without Miracles, Practical Life, etc., etc., etc.

Of course, a work of such depth of thought as this, is beyond our power to criticise. In all the subjects treated which refer to Christianity, the skeptical side is taken and the lines of reasoning are to that end. The articles which make no particular reference to Christianity, are well worthy the consideration of all.

## That New Catalogue.

Owing to an extra amount of work, we have as yet been unable to complete our new 100-page Catalogue, but expect to have it out sometime during the current month. Our patrons can depend upon having a copy by first mail after we receive them from the binder's hands.

Faithfully, FRANK H. LATTIN.



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 Histology,.....HENRY A. KELLY, Dr. G. A. JORDAN.  
 Photography,.....DR. E. V. SCRIBNER.  
 Astronomy,.....WILTON H. DESPER.

### THE FOLLOWING GENTLEMEN ARE EXPECTED TO SPEAK AT SOME TIME DURING THE SEASON:

REV. EDWARD EVERETT HALE, D. D.,.....Curator Museum  
 PROF. EDWARD S. MORSE,.....at Salem.  
 PROF. GEO. L. GOODALE,.....Harvard College.  
 PROF. CLEVELAND ABBE, U. S. Signal Office, Washington, D. C.  
 PROF. J. W. P. JENCKS,.....Brown University.

### CAMP COMMITTEE.

DR. W. H. RAYMONTON, COL. E. B. STODDARD,  
 DR. MERRICK BEMIS, A. P. MARBLE, PH. D.

### PROSPECTUS.

The object of the Worcester Natural History Society in establishing this Summer Camp is to afford a pleasant and profitable place for boys to spend a part, or the whole, of their summer vacation. Here they can live in tents, fish, row, swim, and do all other reasonable things that to a boys' mind constitute "camping out;" in daily association with men of liberal education who lecture on scientific subjects, take boys out on collecting expeditions, take part in their amusements, are ready at all times to answer questions, and assist those who desire to carry on work in any department of Natural History, and do all in their power to make the season so enjoyable, that all will wish to spend every summer vacation at the Camp. During the past five seasons over 800 people have been cared for, and the Camp has become recognized as a permanent educational institution.

### PAST RECORD.

The first camp was pitched in the summer of 1885. From a small beginning the Camp has grown in numbers, efficiency, and resources year by year. It has attracted the attention of many of the foremost educators, literary men, and scientists of the country. Its work has been heartily commended by Prof. Edward S. Morse, Rev. Edward Everett Hale, Col. T. W. Higginson and many others. A report on the Camp and its work by Prof. E. Harlow Russell, principal of the State Normal School at Worcester, was published in 1889, in the fifty-second annual report of the Massachusetts Board of Education. During the season of 1889 it acquired a national reputation, and was visited by many prominent people representing different departments of education.

### LOCATION.

The Camp is beautifully situated on the west shore of Lake Quinsigamond, about one mile north of the causeway, on the old camping and fishing grounds of the Nipmuck Indians. It occupies the forty acre Park owned by the Worcester Natural History Society. This tract includes hills, forest and open land. The location is all that could be desired from a sanitary point of view. The Camp ground is well, but not densely shaded by large forest trees of various kinds; the tents are pitched on dry,

gravelly soil at the foot of Wigwam Hill. The wooded hillside shades the Camp from the afternoon sun. The whole region is a "haunt and nesting place for birds," a tract of wooded hills and upland pastures, clear streams and lakes, which offers every variety of occupation to boys who love out-door life.

### CARE OF THE BOYS.

The system of registration used, together with the roll call, makes it possible to record at headquarters where each camper is, if out of camp, and when he should return. The camp physician goes the rounds every day. The accommodations, sanitary arrangements and food are subject to his approval. No serious illness has ever been contracted at the Camp. Boys are allowed to leave Camp and go to the City or elsewhere if it is the wish of their parents; otherwise not, unless accompanied by one of the officers, instructors or employees. Every care is used during the swimming lessons and excursions to avoid accidents; the boys are taught to use caution when in or upon water; and during the five years of the Camp no casualties have occurred. Fire-arms are not allowed in the Camp. Each boy is required to take a certain care of himself. He is expected to be cleanly and tidy in person and dress, and to keep his quarters neat and orderly. He must air his bed and bedding, make his bed, sweep his floor, hang up or fold his clothes, etc. He may do things after his own fashion, but he must do them effectively, regularly and punctually.

### VISITORS.

Visitors are at all times welcome to the Camp, and arrangements may be made with the steward for meals. At Camp headquarters every possible courtesy will be shown to visitors.

### DAILY ROUTINE.

The slight amount of drill and light military discipline serves admirably as a sort of camp tonic. It is in no way burdensome, and has proved very acceptable to the boys. Fifteen minutes per day are given to gymnastics, which are thoroughly enjoyed by all. These two systems of physical training do much in improving the figure, carriage, etc., without overtaxing the powers in any way.

- A. M.  
 6:00. Reveille.  
 6:15. Reveille roll-call.  
 6:20. Fatigue call.  
 6:45. Mess call.  
 7:30. Inspection.  
 7:50. Company drill.  
 8:30. Gymnastics.  
 8:45. Swimming, (voluntary).  
 P. M.  
 12:30. Mess call.  
 4:15. Swimming, (voluntary).  
 6:00. Mess call.  
 Sunset. Dress Parade and Retreat.  
 9:15. Tattoo.  
 9:30. Taps.

Any boy may go to bed immediately after retreat.

This arrangement gives the boys thirteen and one-half hours per day free time, for lectures, games, excursions and other occupations. Sunday is a day of rest in camp, as elsewhere. Services are held in the Dodge Pavilion in the afternoon by Worcester pastors.

#### THE LECTURES.

Lectures given on scientific subjects by students and teachers, some of whom are eminent in their specialties, are made popular and easy of comprehension. Specimens, drawings, the microscope, telescope and stereopticon, are all used in demonstrating and illustrating. The boys are not compelled to attend, but it has been found by experience that many of them will voluntarily attend, and that nearly all of them become interested in one or more subjects.

#### THE WORKSHOP, LABORATORY AND STUDIO.

The society has a large, well lighted and well appointed workshop on the grounds. This is fitted up with benches, etc., and supplied with tools. It will be in charge of Mr. E. C. Ware, late superintendent of a large manufactory in Pennsylvania, who will teach the boys how to use and care for tools. Mr. A. A. Coburn will build boats or canoes in the workshop during the summer, and explain the manner of building as the work proceeds.

A new departure will be made this year in the upper rooms of the workshop. A room will be fitted up for photographic work by Mr. John M. Bemis, who has devoted much time to photographing microscopic objects. He will instruct the boys in practical photography, and will prepare photo-

graphs of microscopic objects, for use by other teachers. Rooms will be fitted up, one for biological work; one for a studio for drawing and modeling in clay; and another for preparing specimens. Two skilled taxidermists will give lessons in their art.

#### PRACTICAL OUT-DOOR LESSONS.

The hunter will teach the boys the haunts and habits of the game and fish, how to make a camp-fire, pitch a tent, handle an axe, cut wood, build log camps, etc. The lessons in rowing and swimming which have in past years proved of great value, will be continued under efficient instructors. An experienced bee-hunter has been engaged to take the boys on bee hunts several times during the season. The out-door sketching under the care of a New York artist will be made a special feature, and a systematic course given during the eight weeks of camp. Outdoor evening lessons on astronomy, illustrated with the telescope, will be given during the season.

#### EXCURSIONS.

The experience of the past few years goes to prove that the best way to enlist the interest of boys in the study of Natural History, is to take them out into the woods and fields. Here the instructor comes nearer the learner than is usual in the class-room. He is, in fact, not so much of a teacher, as a student, whose studies the pupil is permitted to witness and share. In these excursions the teacher is simply a leader, whose methods of procedure are watched by the class, and whose suggestions or remarks are dropped incidentally, or called forth by questions from individual pupils. It is found that many of the boys catch the spirit of observation with surprising alacrity when it is thus diffused like an atmosphere round the path of an enthusiastic student of nature. While the natural activity of the boy is exercised by walking, climbing, rowing, etc., his perceptive faculties are developed by the continual out-look to discover new objects, and the observation of those pointed out to him by the teacher. Specimens taken are exhibited on the spot, or passed from hand to hand; comments are made on them by the teacher, and thus the boys learn without effort many things they will long remember, and are stimulated to further observation and reflection. No text books are used in any department.

## CAMP FIRE STORIES.

Each week the Camp is in session there will be two evenings devoted to camp fire stories, when the boys gather round the central camp fire to listen to the personal experiences of hunter, soldier, ornithologist or woodman in the wilds. The subjects of these stories will be the Indians and adventures with wild animals, birds, reptiles and fishes. These camp fires will be a popular feature of entertainment and instruction for the season of 1890.

## AMUSEMENT AND RECREATION.

All healthful games, such as base ball, tennis, foot ball and athletic contests, are encouraged. New base ball and tennis grounds will be ready for the coming season. A grand regatta will be held during the first week in August, in which the courses in the various events will be graduated to the strength of the contestants. Suitable prizes will be given to the winners. There are also evening gatherings around the camp fire when each one is invited to contribute his share to the general entertainment. Every week more elaborate evening entertainments are gotten up with music and literary exercises. Illuminations and fireworks are sometimes included in the programme. It is intended that the whole current of life here shall be free and buoyant, and every effort will be made to give every one a good time to which he will look back as long as he lives.

## ACCOMMODATIONS.

The tents are of the army wall pattern, with substantial wood floors and waterproof fly. Each tent will accommodate four persons, and is provided with straw mattresses, wash basins, a tin dipper, pail and broom. Campers furnish their own blankets, pillows, towels, etc. Meals are provided in spacious dining tents, and there is also an enclosed pavilion and large workshop for the use of members. Other buildings will be built this season.

## FOOD.

A variety of good wholesome food is prepared by excellent cooks. Plenty of fresh sweet milk is furnished direct from Shrewsbury farms. No pains will be spared to supply just what is most needed by growing boys.

## CONDITIONS OF MEMBERSHIP.

Boys of good character, of the school age from ten to eighteen, can join the

Camp at any time during the season for one week or the eight weeks the Camp is in session, provided *Application is made in advance*. The Camp is as far removed as possible from being a Reformatory, and no boy will be received or retained who is vicious. While the management desires and intends to afford the boys all possible freedom during their stay at the Camp, some restraints are absolutely necessary in a camp of boys, and members are expected to submit to the mild form of camp discipline, which has proved so wholesome in the past.

## WHAT TO TAKE TO CAMP.

Every boy should be provided with the following articles:

Note books, sketch book, two or three heavy double or four single blankets, a pillow, his customary summer underware, three flannel shirts, plenty of stockings, a suit of medium weight woolen clothes, two pairs of good weight shoes, an overcoat, a rubber coat, rubber boots, bathing trunks, a soft felt hat for bad weather, handkerchiefs, hair brush and comb, clothes brush, tooth brush, shoe brush and blacking, and a box containing pins, needles, thread, buttons, roll of white tape, indelible ink, thimble, scissors, a piece of beeswax, a ball of string and a package of court plaster. These articles are not required by the rules, but will be found useful.

## APPLICATIONS.

Blank forms of application for membership are supplied, and will be mailed to any given address. Any one desiring to spend a few weeks at the Camp is requested to state the dates of his intended arrival and departure.

If the application is for the entire season, it should be so stated. All who intend to join the Camp of 1890 must send in their applications at once, so that the number of season members may be known at an early date, and a correct record made of those who desire accommodations for a short time only. It has been found that those who make application for a week's stay at Camp, usually desire to stay longer after a week's experience. This they can do by giving notice, *provided* a vacancy exists for which there are no previous applicants.

Applicants for the season will be given the preference. Transients will be registered in the order of application.

## EXPENSES.

Members received at Seven Dollars per week, payable in advance. This covers the entire expense of living in Camp, board, lodging, swimming lessons, gymnastics, lectures, lessons, etc., etc. There are no "Incidentals."

A uniform cap, blouse and trousers, all of dark blue, is furnished by the Society at Seven Dollars per suit. To those bringing dark blue trousers, a cap and blouse will be furnished for Three and one-half Dollars.

A blouse and cap will be rented to those who wish them, at Fifty Cents per week.

## HOW TO REACH CAMP.

The following railroads center in the Union Station, at Worcester:

Boston & Albany; Boston & Maine; Fitchburg; New York, Boston & Providence; and the Norwich & Worcester Branch of the New York & New England. The through express trains of the New York, New Haven & Hartford R. R. also stop here. Baggage can be checked from any point to Worcester. Here a change of cars and a transfer of baggage must be made to the Worcester & Shrewsbury R. R. The station is on the north side of the Union Station. Here a ticket to Camp will cost Twenty Cents. These trains run hourly, leaving Worcester on the half-hour and connecting with the steamer Apollo of the Lake Quinsigamond Steamboat Co. Those having baggage to be transferred here should notify the purser on the boat. The Apollo lands passengers and baggage on the wharf at the Camp.

**The Summer Camp for Girls.**

This is a camp for families, and is designed especially for Ladies and Girls. It was established by the Worcester Natural History Society during the season of 1889, at Tower Hill on the east shore of the Lake, and nearly opposite the Boys' Camp. Thomas H. Dodge, Esq., of Worcester, a liberal patron of the Boys' Camp, has offered the use of this land and a building that the girls may enjoy some of the advantages which their brothers have across the Lake. A very successful beginning was made last season. The prospectus of this Camp will be ready in May.

For further information in regards to either Camp address, PRESIDENT WORCESTER NATURAL HISTORY SOCIETY, Museum, No. 11 Foster Street, Worcester, Mass.

**To Our Subscribers.**

In this OOLOGIST we make two *extraordinary* offers in order to obtain hundreds of new subscribers. One offer is the \$1.00 offer which entitles the sender to a full year's subscription to THE OOLOGIST, and the other the 25c trial trip offer. We well know that with the co-operation of our friends and the liberal offers we make that we can easily obtain hundreds of subscriptions within the next 30 days. Our offers are so very liberal that we really cannot afford to give anything for obtaining subscriptions, but in order to induce our patrons to use their influence in our behalf and to call their friends' attention to our offers, we will send them a card good for anything we advertise, to the amount of 10 per cent. of the amount they have induced their friends to let them send us, in accordance to either or both our \$1.00 and our 25c offer. For example: If you should obtain three persons to accept our \$1.00 offer, and eight our 25c one, you would send us \$5.00, for which we would send you by return mail a card good for 50c worth of anything we advertise, or if you should induce only one to accept our \$1.00 and one our 25c offer, we would send you a card good for 12½c.

Many of your friends would be glad to have a chance to subscribe for THE OOLOGIST, and we think with a very little labor you could easily send us a goodly number of subscriptions during the next 60 days. Many of our patrons will send us more names and more money than others, and in order to show our appreciation for their extra work, we offer the following prizes in addition to our 10 per cent. offer, viz :

To the person sending us the greatest amount of money in acceptance of our 25c and \$1.00 offers on or before August 1st, 1890, we will give a copy of Maynard's Birds of Eastern North America. Publishers price, \$18.00.

To the person sending the 2nd greatest amount, a copy of Ridgway's Manual of North American Birds. \$7.50.

To the next three persons, each a copy of Davie's Key to N. A. Birds. Cloth, each \$1.75.

To the next five, each a copy of Davie's Key. Paper, each \$1.25.

To the next ten, each a set with data of the Noddy. Each \$ .75.

To the next twenty, each a set with data of the Sooty Tern. Each \$ .35.

All subscriptions must be sent us on or before August 1st, 1890.

The winner of 1st prize must send us not less than \$25.00 worth of subscriptions; of the 2nd prize not less than \$15.00 worth

3rd to 5th not less than \$5.00 worth; 6th to 10th not less than \$3.00 worth; 11th to 20th not less than \$2.30 worth; 21st to 40th not less than \$1.30 worth.

The names of the lucky contestants will be published in September OOLOGIST.

Begin work at once. Address all orders plainly, Frank H. Lattin, Publisher of THE OOLOGIST, Albion, N. Y.

## THE OOLOGIST

Is a 20-page (16 pages of inside matter with a colored cover) Monthly issued during the first week of each month. For this issue we had so much additional matter, that in order to get it all in, we omitted the cover, but to offset, give our patrons *twelve* extra pages, which we think will prove to their entire satisfaction. We make this explanation for the benefit of the hundreds of new subscribers which will be sent in during the next 30 days.

The publisher of the OOLOGIST is immodest enough to claim that *each* number is worth to the live collector or student of birds, their nests and eggs, the whole amount a trial trip or yearly subscription would cost them.

### Any One Interested

In the sick-benefit, funeral-aid, and death-beneficiary associations of the United States can help make the statistics of their organizations for the forthcoming census more complete and disseminate the knowledge of the good work they are doing by sending the names of such societies as they may know of, and the addresses of their principal offices, to Mr. CHARLES A. JENNEY, Special Agent of the Eleventh Census, 58 William street, New York City.

## GLASS EYES.

Please note our reduced price-list of Glass Eyes in this OOLOGIST. It is always well for our patrons to bear in mind that we can at all times furnish *anything offered by any American dealer and that we will always meet their prices and usually do a little better.*

Our patrons can order anything in our line whether advertised by us or not and can *depend* upon having their order filled, if articles ordered are obtainable in America.

FRANK H. LATTIN.

## FOR ONLY 25 CENTS!

We Will Send the OOLOGIST on Trial from Now until January 1st, 1891,

And give you your choice of any of the following desirable Premiums.

1. Oologists' Handbook.
2. "Insect Collecting," a little handbook telling all about it.
3. 10 Checking-Lists, 4 styles.
4. 18-100 Egg Drill.
5. Brass Blowpipe.
6. Set of 60 Beautiful Bird Cards.
7. 12 Wild Mexican Potatoes.
8. 2 Resurrection Plants.
9. 100 var. Foreign Stamps.
10. Choice Herk. Co. Doubly Terminated Rock Crystal.
11. Fine Chialostolite Crystal.
12. Fine Sturoilite Crystal.
13. Choice Specimen of Opalized Wood.
14. Splendid Fossil, *Scaphites nodosus*, from Black Hills.
15. Fossil Sea Urchin, from Texas.
16. Large Fossil Polyp Coral or "Petrified Horn," from Western New York.
17. Choice Spec. of "Kid Conch (*Strombus bituber-culatus*) from West Indies.
18. Small Sea Horse.
19. Small King or Horse-foot Crab.
20. A Beautiful Sea Fan.
21. 2 Boxes of Pharaoh's Serpent Eggs.
22. The Joker's Photo Camera—will produce a picture in 3 min. and make \$5.00 worth of fun.
23. Large Alligator Tooth.
24. A 25c assortment of Glass Eyes.
25. 25 Assorted Fish Hooks.
26. 4 " " " Lines.
27. Egg of Great-tailed Grackle.
28. Egg of Sennett's Thrasher.
29. (For 10 cts. additional) Set, with data, of 1 egg of Sooty Tern.
30. Collection of 8 Common Eggs, worth, at list rates, 20 cts.
31. Egg of Shark.
32. Egg of Hammerhead or Leopard Shark, second class.
33. A Curious Ham Shell, *Perna ephippium*.
34. Bottle of Oologists' Cement.
35. Card good for a 25 word Exchange Notice in the OOLOGIST.
36. Brazilian Vegetable Ivory Nut, one side ornamentally carved.
37. An Extra Fine Arrowhead.
38. A Fine Piece of Polished Agate.
39. A Fair Trilobite, *Calymene Niagaraensis*.
40. A V-Nickel without the word "cents."

We will send the OOLOGIST on trial 6 months and your choice of any one of the above

## For Only 25 Cents.

Additional premiums, 15c each; 8 for \$1.00. 15 for \$2.00, or entire 40 for \$4.00, all prepaid.

We had ought to be able to obtain over 1600 new trial subscribers within 30 days.

Show the offer to your friends and induce them to send in their subscriptions AT ONCE.

Address,

**FRANK H. LATTIN,**  
Pub. of the OOLOGIST,  
ALBION, NEW YORK.



# IN ORDER TO REDUCE OUR Surplus Stock of Birds' Eggs

We quote the following Liberal Discounts for

## The next 30 Days,

on eggs of the following species. Orders of 50 cents or over will be sent prepaid, under that amount 5 cents must be added for postage and packing.

<b>For \$1.00 you can select eggs to the amount of \$1.50.</b>					
“ 2.00	“	“	“	“	“ 3.00.
“ 3.00	“	“	“	“	“ 6.00.
“ 5.00	“	“	“	“	“ 11.00.
“ 10.00	“	“	“	“	“ 25.00.

This offer will hold good until July 15th and for *single eggs only*.

Send 2 cents for complete price-list of eggs.

Eggs are numbered to correspond with Ridgeway's Nomenclature.

All eggs are carefully prepared, being blown from one smoothly drilled hole in the side, and are true to name.

All specimens will be carefully packed in strong tin or wooden boxes and sent at *purchaser's* risk by mail, or at *our* risk and *purchaser's* expense by express.

SECOND-CLASS SPECIMENS can be furnished of most species at one-half the price of a first-class one. Parties ordering second-class eggs must name a list of extra eggs to be used as substitutes in case we are out of those ordered.

Hobbel's Grebe..... \$ 50	Limpkin..... 1 25	Hawk Owl..... 1 00
Horned Grebe..... 35	Clapper Rail..... 10	Burrowing Owl..... 25
American Eared Grebe..... 25	Florida Gallinule..... 12	Groove-billed Ani..... 1 00
Pied-billed Grebe..... 10	American Coot..... 10	Road-runner..... 25
Tufted Puffin..... 1 00	Red Phalarope..... 1 00	Yellow-billed Cuckoo..... 10
Puffin..... 20	Northern Phalarope..... 50	California Cuckoo..... 25
Cassin's Auklet..... 3 00	Black-tailed Godwit..... 50	Belted Kingfisher..... 20
Black Gullinnot..... 20	Willet..... 40	Hairy Woodpecker..... 50
Murre..... 20	Barttram's Sandpiper..... 40	Downy Woodpecker..... 20
California Murre..... 25	Spotted Sandpiper..... 15	Red-cockaded Woodpecker..... 1 25
Razor-billed Auk..... 20	Long-billed Curlew..... 75	Pileated Woodpecker..... 1 00
Skua..... 75	Winnabrel..... 40	Red-headed Woodpecker..... 08
Kittiwake..... 40	Killdeer..... 20	Lewis' Woodpecker..... 40
Glaucous Gull..... 85	Wilson's Plover..... 25	Red-bellied Woodpecker..... 50
Island Gull..... 1 50	Bob-white..... 10	Golden-fronted Woodpecker..... 75
American Herring Gull..... 20	Florida Bob-white..... 15	Flicker..... 03
Ring-billed Gull..... 30	Texas Bob-white..... 10	Red-shafted Flicker..... 10
Laughing Gull..... 20	California Partridge..... 10	Chick-wills-widow..... 1 50
Franklin's Gull..... 75	Valley Partridge..... 20	Nighthawk..... 40
Gull-billed Tern..... 15	Gambel's Partridge..... 20	Western Nighthawk..... 50
Caspian Tern..... 50	Ruffed Grouse..... 10	Chimney Swift..... 15
Cabot's Tern..... 40	Willow Ptarmigan..... 75	Sciss-r-tailed Flycatcher..... 10
Forster's Tern..... 15	Rock Ptarmigan..... 1 00	Kingbird..... 03
Common Tern..... 08	Prairie Hen..... 20	Gray Kingbird..... 40
Arctic Tern..... 15	Sage Grouse..... 50	Arkansas Kingbird..... 08
Least Tern..... 08	Wild Turkey..... 75	Cassin's Kingbird..... 25
Sooty Tern..... 35	Chachalaca..... 1 50	Ash-throated Flycatcher..... 25
Black Tern..... 12	Red-billed Pigeon..... 2 00	Crested Flycatcher..... 12
Noddy..... 75	Mourning Dove..... 03	Phoebe..... 05
Black Skimmer..... 12	White-winged Dove..... 30	Say's Phoebe..... 10
Fulmar..... 75	Ground Dove..... 25	Black Phoebe..... 20
Manx Shearwater..... 1 00	Inca Dove..... 75	Wood Pewee..... 15
Audubon's Shearwater..... 2 00	Turkey Vulture..... 75	Western Wood Pewee..... 20
Brown Pelican..... 25	Black Vulture..... 75	Western Flycatcher..... 25
Gairwall..... 50	Mississippi Kite..... 10 00	Acadian Flycatcher..... 20
Baldpate..... 75	Red-tailed Hawk..... 60	Little Flycatcher..... 40
European Teal..... 20	Western Red-tail..... 75	Traill's Flycatcher..... 20
Blue-winged Teal..... 25	Red-shouldered Hawk..... 50	Prairie Horned Lark..... 20
Shoveller..... 40	Flt. Red-shouldered Hawk..... 1 25	Desert Horned Lark..... 20
Platail..... 40	Red-bellied Hawk..... 1 00	Ruddy Horned Lark..... 35
Wood Duck..... 75	Bald Eagle..... 5 00	American Magpie..... 25
American Scamp Duck..... 60	American Sparrow Hawk..... 25	Blue Jay..... 05
Barrow's Golden-Eye..... 1 00	Audubon's Caracara..... 1 25	Florida Blue Jay..... 50
Old-Squaw..... 40	American Osprey..... 50	California Jay..... 25
Harlequin Duck..... 1 25	Am. Long-eared Owl..... 35	American Crow..... 05
Greenland Eider..... 30	Short-eared Owl..... 1 25	Florida Crow..... 50
American Eider..... 20	Barred Owl..... 1 00	Northwest Crow..... 50
American Scoter..... 2 00	Florida Barred Owl..... 1 00	Fish Crow..... 25
American Flamingo..... 1 00	Florida Screech Owl..... 50	Bobolink..... 20
Great White Heron..... 1 20	Texas Screech Owl..... 50	Dwarf Cowbird..... 20
Ward's Heron..... 40	California Screech Owl..... 50	Yellow-headed Blackbird..... 05
Black-crowned Night Heron..... 10	Great Horned Owl..... 1 20	Red-winged Blackbird..... 02
Yellow-crowned Night Heron..... 25	Western Horned Owl..... 1 25	Bicolored Blackbird..... 00

Tricolored Blackbird.....	20	Callifornian Towhee.....	08	Curve-billed Thrasher.....	25
Meadowlark.....	12	Cardinal.....	05	Callifornian Thrasher.....	25
Western Meadowlark.....	12	Texan Cardinal.....	50	Cactus Wren.....	12
Hooded Oriole.....	50	Rose-breasted Grosbeak.....	15	Carolina Wren.....	15
Arizona Hooded Oriole.....	50	Black-headed Grosbeak.....	20	Bewick's Wren.....	50
Orchard Oriole.....	10	Blue Grosbeak.....	25	Bald's Wren.....	25
Bullocks Oriole.....	15	Indigo Bunting.....	05	House Wren.....	06
Brewer's Blackbird.....	05	Lazuli Bunting.....	20	Western House Wren.....	06
Purple Grackle.....	04	Painted Bunting.....	10	Long-billed Marsh Wren.....	06
Bronzed Grackle.....	04	Black-throated Bunting.....	05	Tule Wren.....	15
Great-tailed Grackle.....	20	Lark Bunting.....	50	White-breasted Nuthatch.....	30
Purple Finch.....	15	Scarlet Tanager.....	25	Brown-headed Nuthatch.....	35
Horse Finch.....	06	Summer Tanager.....	20	Tufted Titmouse.....	35
Arkansas Goldfinch.....	20	Purple Martin.....	15	Carolina Chickadee.....	15
Lawrence's Goldfinch.....	25	Cliff Swallow.....	04	Callifornian Bush-Tit.....	15
Snowflake.....	50	Barn Swallow.....	05	Verdin.....	50
Yellow-winged sparrow.....	20	Bank Swallow.....	04	Blue-gray Gnatcatcher.....	20
Chestnut-collared Longspur.....	75	Cedar Waxwing.....	10	Western Gnatcatcher.....	50
Lark Sparrow.....	05	Loggerhead Shrike.....	15	Wood Thrush.....	06
W. Lark Sparrow.....	05	White-rumped Shrike.....	05	Wilson's Thrush.....	15
Cambel's Sparrow.....	25	California Shrike.....	18	Russet-backed Thrush.....	15
White-throated Sparrow.....	35	Red-eyed Vireo.....	10	Olive-backed Thrush.....	40
Chipping Sparrow.....	02	Warbling Vireo.....	20	Hermit Thrush.....	40
Western Chipping Sparrow.....	10	White-eyed Vireo.....	20	American Robin.....	02
Field Sparrow.....	04	Bell's Vireo.....	15	Western Robin.....	15
State-colored Junco.....	21	Prothonotary Warbler.....	31	Bluebird.....	02
Black-throated Sparrow.....	50	Parula Warbler.....	25	Western Bluebird.....	15
Song Sparrow.....	02	Maryland Yellow-throat.....	15	Mountain Bluebird.....	15
Desert Song Sparrow.....	50	Yellow-breasted Chat.....	10	English Sparrow.....	01
Heermann's Song Sparrow.....	12	Long-tailed Chat.....	15	European Tree Sparrow.....	15
Sauamel's Song Sparrow.....	08	American Redstart.....	15	SUNDRIES.	
Swamp Sparrow.....	15	Mockingbird.....	05	Skate.....	65
Towhee.....	10	Catbird.....	02	Shark.....	15
Spurred Towhee.....	5	Brown Thrasher.....	63	Hammerhead or Leopard Shark.....	25
Oregon Towhee.....	41	Sennett's Thrasher.....	30		

# WILD POTATOES. Very Desirable Eggs

## GROW YOUR CURIOSITIES.

We have just obtained a limited supply of Wild Mexican Potatoes. When mature they are about the size of a Catbird's egg, or in other words average about three-fourths of an inch in diameter.

They were taken from the mountains in Mexico. The vines look a little like common potatoes vines, but more like water-melon vines. The blossoms resemble closely the common potato. The little tubers do not grow in hills, but more like sweet potatoes or peanuts, on the rootlets which form a network under ground. They yield well. They are quite a curiosity, every collector should be interested in them.

We desire to introduce them this season and in order to do this, we have made the price very low, viz: We will send by return mail, prepaid, three Samples for 5c, eight for 10c, twenty-five for 25c, one hundred for 75c, two hundred for \$1 25.

We have only a few hundred to spare and we predict that a few wide-awake collectors will make a big thing out of them in making exchanges next winter. Remember they are very prolific, easy grown, and that too in any portion of U. S. Order at once or you may be too late. Address,

FRANK H. LATTIN,  
ALBION, N. Y.

## Less Than Half Price!

Sennett's Thrasher.....	\$ .30
Brown-headed Nuthatch.....	.35
Texan Cardinal.....	.50
Great-tailed Grackle.....	.20
Dwarf Cowbird.....	.20
American Magpie.....	.25
White-winged Dove.....	.30
Sooty Tern.....	.35
Noddy Tern.....	.75

\$3.20

We will send any egg on the above list prepaid on receipt of price, \$2.00 worth or over, at one-half price, or will send

## THE ENTIRE LOT FOR ONLY \$1.40!

This offer is good until July 1st. We have only 50 of the \$1.40 collections. If you desire one, order early. If all sold when your order is received, your money will be returned.

FRANK H. LATTIN,  
Albion, N. Y.

# REVOLVERS

American Double Action Revolvers. 32 and 38 cal C. F., price \$2.50. Same, 4½ or 6-inch barrel, \$3.50. Ladies' Pet. 22 cal., double action, 7-shot, price \$2.25. Single action. 22 or 32, rim fire, \$1.50. Send for prices. Goods sent C. O. D. on receipt of \$1.00.

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**BOYS!** You want the Young Idea, the brightest, best and cheapest Juvenile Magazine published. Has hobby column, and page devoted to Sports of the Season. Will be sent six months for 10c, if you cut out and return this slip. Address, **GRANT C. WHITNEY,** 6m3 Belvidere, Ill.

## How to Make Electric Batteries at Home.

BY E. TREVERT.

This volume contains the information needed for making E. Batteries (open and closed circuit) for running motors, lamps, bells, etc. The expense of such Batteries is small, and articles can be obtained at any drug store. Price 25c. Address, **B. F. EVANS,**

Dealer in Electrical Supplies,  
6y MADISON, WIS.

**TELEPHONES** for private lines. Sold outright. Circulars free. Address, **HARBERT TELEPHONE CO.,** 1-2 W. Van Buren St., Chicago, Ill. Circulars free. Agents wanted.

## IDENTIFICATION!

During the past few years we have cheerfully attempted to

### IDENTIFY ALL SPECIMENS

our friends have sent us, and this without remuneration; but owing to the fact that we are now receiving packages by the dozen for this purpose, and that our time is more than occupied with our regular business, in the future we shall be obliged to CHARGE our friends in addition to return postage the following

#### RATES:

Single or first Specimen, - 10 cts.  
Second to tenth Specimen, - 3 cts. each.  
Eleventh Specimen and over, - 2 cts. "

The above rates for identifying we think very reasonable. We have spent several years in handling and studying specimens of various kinds, and have on hand a very large stock with which comparisons can be made. We also have the leading works to use as reference. The advantage of having specimens properly identified is invaluable to collectors.

Address,  
**FRANK H. LATTIN, Albion, N. Y.**



Wood Engraving  
—FOR—  
**NATURALISTS**  
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GOOD WORK,  
LOWEST PRICES.  
*Correspondence Solicited*  
**H. A. CARHART,**  
d yr Syracuse, N. Y.

## Tillinghast's New Floral Album

Is not a Seed Catalogue, but a magnificent volume containing 270 Elegant colored Plates. This magnificent collection of Floral Lithographs has cost over Twenty-five Hundred Dollars and has heretofore sold at Fifty Cents per Copy alone, but to introduce it and my seeds, I will now for a limited time offer to send postpaid by mail, on receipt of 75 Cents (postal note, silver or postage stamps) one copy of this Elegant Floral Album and 12 packets of our choicest and most popular Flower Seeds, viz: One each of choicest mixed Asters, Balsams, Pansies, Verbena, Petuna, Zinnia, Poppy, Aconitum or Strawflower, Drummond Phlox, Sweet Peas, Scabiosa and Mignonette. The catalogue price of the seeds alone is \$1.00, yet for introduction I will mail them all and a copy of the Beautiful Album for 75 cents.

I WANT AGENTS and will pay them well to take orders among their friends for this great combination. My seed catalogue will be sent free with each order.

Address,  
**ISAAC F. TILLINGHAST,**  
Box 1031, La Plume, Pa.

## WHITE LEGHORNS.

A fine strain of White Leghorn Fowls. Eggs 13 for \$1; 25 for \$1.75. No better stock in this country. Good reference given if desired.

Address, **H. C. CAMPBELL,**  
Lansingburgh, Rens. Co., N. Y.

## NEW BOOK.

### EGGS OF NORTH AMERICAN BIRDS,

BY CHAS. J. MAYNARD.

159pp. 12mo., 10 colored plates, cloth, \$2.00.

A full description with breeding dates. Sent postpaid on receipt of price.

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## Exotic Butterflies and Moths

In brilliant colors and of rare beauty, from India, Australia, Africa and South America for cash or half cash and half in rare eggs or fine bird skins. Also fine cocoons from other countries. Send 5c for catalogue. State what you want distinctly. Absolutely no attention paid to postal cards. Collections made up in cabinets for museums and colleges, containing all the classes of insects from every clime. We have the largest stock of Lepidoptera in New England and charge the lowest prices in the United States.

**PROF. CARL BRAUN,**  
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SIZES.		STYLE 1. FOR BIRDS, ETC.	STYLE 2. 1 EXTRA.	STYLE 3. 2 EXTRAS.	STYLE 4. 3 EXTRAS.	BLACK. CHEAP, FOR BIRDS, ETC.			DIAGRAM NUMBER.
NO. ON DIAGM.	DIAM. IN INCHES.	1 PAIR.	1 PAIR.	1 PAIR.	1 PAIR.	1 PAIR.	10 PAIRS.	50 PAIRS.	
0	2-32	.02	.03	....	....	.01	.03	.10	0
1	3-32	.02	.03	....	....	.01	.03	.10	1
2	4-32	.02	.03	....	....	.01	.03	.10	2
3	5-32	.02	.03	....	....	.01	.04	.12	3
4	6-32	.03	.04	....	....	.01	.04	.14	4
5	7-32	.03	.04	....	....	.01	.05	.18	5
6	8-32	.03	.04	.08	.10	.01	.06	.20	6
7	9-32	.04	.05	.08	.10	.02	.07	.26	7
8	10-32	.04	.05	.10	.12	.02	.08	.30	8
9	11-32	.05	.06	.10	.12	.02	.09	.40	9
10	13-32	.05	.06	.12	.14	.02	.12	.50	10
11	14-32	.06	.07	.12	.14	.02	.14	.60	11
12	15-32	.07	.08	.13	.14	.02	.15	.80	12
13	16-32	.08	.10	.15	.16	.02	.18	.85	13
14	17-32	.09	.12	.16	.18	.03	.24	1.00	14
15	18-32	.10	.12	.18	.19	.04	.30	1.25	15
16	10-16	.12	.14	.18	.22	.04	.35	1.50	16
17	11-16	.14	.16	.20	.24	.05	.40	1.60	17
18	12-16	.16	.18	.24	.32	.06	.45	....	18
19	13-16	.18	.20	.30	.38	.06	.50	....	19
20	14-16	.24	.26	.35	.40	.08	.65	....	20
21	15-16	.24	.26	.40	.45	.10	.80	....	21
22	1	.32	.35	.45	.50	.14	1.10	....	22
23	1 2-16	.32	.35	.50	.55	.16	1.25	....	23
24	1 3-16	.38	.40	.55	.60	.20	1.50	....	24
25	1 4-16	.40	.45	.55	.65	.22	1.75	....	25
26	1 5-16	.45	.50	.60	.70	.25	2.25	....	26
27	1 7-16	.50	.60	.70	.80	.30	2.75	....	27

For Sizes, see preceding page. For full description of Styles, see next page.

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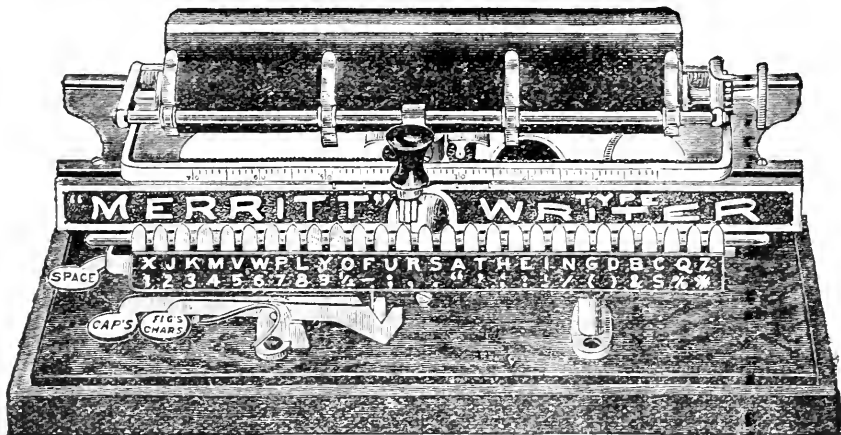
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For first-class Eggs, single or in sets, for which I will allow full list prices.

Below will be found a list of what I have to exchange, also prices asked, which is from regular price to about 1½. Postage must be added, which will be about 13c per bird. Bal. will be returned. If you have any dup. eggs to exchange, please send list at once, stating what you desire.

A. O. U. Nos.—748, 726, 595 fem., \$1.50 each; 766, 735, 621, young male, 581, 567, 559, 540, 495, 456 \$2.00 each; 728, 587, 507, 498, \$2.50 each; 761, 704, 705, 674, 632, 624, 619, 501, 477, 444, \$3.00 each; 242, 412, \$4.50 each; one pair of 130, \$7.00, by express.

Note.—Those desiring to purchase for cash, will find a list in May No. of this paper. I still have a few of each except 394. Eggs are exhausted. Stamp for reply.

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# OÖLOGIST.

Monthly.

50c. per Year.

Vol. VII.

ALBION, N. Y., JULY, 1890.

No. 7

## Exchanges and Wants.

Brief special announcements. "Wants," "Exchanges" inserted in this department for 25 cents per 25 words. Notices over 25 words charged at the rate of one-half cent per word. No notice inserted for less than 25 cents. Notices which are merely indirect methods of soliciting cash purchasers cannot be admitted to these columns under any circumstances. Terms, cash with order.

I received so many cards, letters and circulars lately that I could not answer them all." RALPH ALNOLD, Pasadena, Cal.

CAUSE.—A single Exchange Notice in the Oölogist.

TO EXCHANGE.—A pair of Climbers and a pair of Bellan Clubs for a Telescope or Maynard's Eggs of North American Birds. A. H. WAITE, West Newton, Mass.

FIRST and Second-class Birds' Eggs of this Section to exchange for Eggs of other sections. Want a good Taxidermist's Guide. Write with stamp. MERTON W. GRILLS, Lewisville, Ind.

WANTED.—Typical Sets, marked with A. O. I. numbers, in exchange for Sets and Singles. J. R. CRAIG, E. Jackson, Minn.

WANTED.—First-class Eggs, single or in sets. Will give for same. Eggs of Nicely Stuffed Birds. Enclose Stamp. JAMES P. BABBITT, 10 Hodges Ave., Taunton, Mass.

TO EXCHANGE.—First-class Singles and Sets with data, in exchange for other first class Sets. Send list and receive mine. All letters and cards answered. RALPH ALNOLD, Pasadena, Cal. 193

I would like to exchange rare Cacti for Birds' Eggs in sets with data. Send list and receive mine. J. H. TALLCHET, 201 University Ave., Austin, Texas.

WANTED.—A 22 rifle for \$4.00 worth of first-class Sets and Singles. Send description of rifle and receive my list. W. BERMAN, 1050 Ingraham St., Los Angeles, Cal.

TO EXCHANGE.—Rare Western Eggs in first-class original sets with complete data. Lists wanted from reliable parties only. WALTER L. RICHARDSON, 435 So. Moline Ave., Pasadena, Cal.

WANTED.—Skins of (A. O. U.) 289a, to 296, 360 and any of the owls. As I intend to stuff them, they must be full plumaged birds and with complete data. For the above, I will exchange Glass Eyes, Skins, Stuffed Birds and Eggs. Will allow good time. Enclose Stamp. JAS. P. BABBITT, 10 Hodges Ave., Taunton, Mass.

WANTED.—A good second-hand Single or Double barrel Breech-loading Shot-gun, 16 or 14 gauge. Will give first-class Birds' Eggs in exchange. OSWALD F. ZAHN, 317 S. Hope St., Los Angeles, Cal.

TO EXCHANGE.—A fine collection of 55 varieties of Birds' Eggs, for Guitar or Cornet. R. W. ORCUTT, Amstunburg, Ohio.

DESIRABLE Sets and Singles to exchange for S. and W. 32 or 35 cal. Revolver, Kodak or Detective Camera, Field Glasses, Self-inking Press or Type. C. TURTON, Box 956, Los Angeles, Cal.

TO EXCHANGE.—324, 315, 251, 278, 119a, 480, 351, 270, Prairie Horned Lark, Hawks particularly wanted, but others taken. All correspondence answered. JAMES HILL, Edinburg, Ills.

TO EXCHANGE.—A Colt's Rifle, 22 calibre, 16-shot, just bought, valued at \$15.00, for the best offer in Bird Skins. Wm. T. SMITH, Box 194 Wayne, Del. Co., Pa.

TO EXCHANGE.—I have a collection of 50 first-class Birds' Eggs to exchange for the best collection of Stamps offered me. All letters answered. Address, W. N. FLEMING, Natick, Mass.

GOOD 7-shot Revolver, 22 cal., but little used cost \$4.50. Will exchange for best offer of large showy Eggs. Send exchange lists with offers and receive mine. C. H. PRINCE, Danabsonville, Conn.

BIRDS' Eggs, Indian Relics, Coins, Autographs, to exchange for any class of curios in any quantity. Write what you have and want and I will make offer. CHESTER JOHNSON, Fargo, N. D.

WANTED.—A good Typewriter or any Birds' Eggs in sets. Will give in exchange, Shells, Minerals and Curios. Large and rare lots especially desired. DICKINSON & DURKEE, Sharon, Wis.

TO EXCHANGE.—50 varieties of Foreign Stamps for every perfect arrowhead or for every 25c worth of Eggs, listed at 3c or over sent me. ALMANZOR R. HUTCHINSON, Box 138, Gaines, N. Y.

MY permanent address is Waynesburg, Penn., but for the summer and autumn, please address me as given below. Will be pleased to arrange exchanges with my old correspondents and new ones too. J. WARREN JACOBS, Glenwood (Pittsburg), Pa.

TO EXCHANGE.—Original Sets, Ridgeway's Nos., 4, 63a, 245, 183, 170a, 338 and 460; also Singles for large or Water Birds' Eggs in original sets, or large Singles. Sets of Herons' and Pelicans' desired. FRED A. SCHNEIDER, College Park, Santa Clara Co., Cal.

**EXCHANGES AND WANTS, Continued.**

Have you read Lattin's "Exchange Extraordinary" in this Oologist?

**EXCHANGE.**—I have a long list of desirable Eggs, in full sets, with complete data to exchange with reliable collectors for sets with accompanying data. Eggs of the Prothonotary Warbler in any quantity. Send lists and receive mine. D. R. BURROWS, Lacon, Marshall Co., Ills.

**WANTED.**—To exchange the following first-class Eggs, single or in sets, for others. Nos. 1, 111, 7, 122, 123, 135, 143, 157, 211, 214, 238, 270, 278, 282, 261, 263, 315, 321, 324, 354, 357, 382, 425, 451, 454, 480, 431, 525, 571, 670, 93, 63, 574. Data furnished if desired. All letters answered. M. C. WHITE, Mathews C. H., Va.

**TO EXCHANGE.**—I have 100 Stamping Outfits worth \$1.50 per set, 1 Accordeon, \$8.00, 1 Magnetic Bell, \$25.00, 1 Peerless Fountain Pen, \$2.50, lots of Books, Eggs, etc., for Eggs in sets, with data, or Indian Relics. Write what you have, if you mean business; "Silence is Golden," if you do not. Address, C. A. MORRIS, Paw Paw, Ill.

**WANTED.**—125 Fonts of Small Type like that used in printing the Oologist; also 50 Fonts Large and Fancy Type; also the Latest Edition of Ridgway's Key for which I will give \$15.00 in first-class Sets; also good Double-barrel, Green-loading Shotgun (14 or 16 gauge); also Typewriter. Those having any of the above to exchange for first-class Skins or Sets out of a collection of 1000 Eggs send particulars to H. W. SOLTE, W. 16th St., Los Angeles, Cal.

**TO EXCHANGE.**—A Rotary Plate, Self-inking Golding Printing Press, case, 4 1/2 x 3, with outfit, and an Accordeon, for best offer of Curiosities, especially Coins, Stamps, Indian Relics and Bird Eggs with data, not necessarily in sets. For particulars, address EDW. B. JONAS, Box 221, Beaver Dam, Wis.

**TO EXCHANGE.**—Two Printing Presses, one 5 x 8, Self-inking; one 10 x 15 Foot Power, and several Fonts of Job Type and complete outfit for Safety Bicycle. A. M. EDDY, Albion, N. Y.

**TO EXCHANGE.**—First-class Eggs of Eastern Pennsylvania; Singles or Sets, with full and original data. Send list. JOSE P. JACKSON, Kelton, Ches. Co., Pa.

**EXCHANGE.**—A Receipt telling how to mount birds in a life-like manner for every set of eggs sent, except 12 and 22, with data. J. W. P. SMITHWICK, Sans Souci, N. C.

**TO EXCHANGE.**—The following first-class Eggs, in sets, with data, for the best offer of first-class Eggs in pairs. A. O. Nos., 443, 522a, 622a, 421, 319, 399a. H. SAYERS, JR., Abilene, Tex.

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**WANTED.**—To exchange sets of the following for others: 1, 7, 12, 13, 149, E. S., 274, 261, 279, 271, 275b, 279, 304, 387, 469, 494, 673, 763, 765a; also many Singles, including European varieties; also Foreign Postal Cards. Only sets with Nos. data blanks accepted. Lattin's list as a basis of exchange. W. MORGAN MARTIN, 309 E. Ninth St., Wellington, Kansas.

**IMPORTANT.**—I care to make exchanges during the next 60 days as per offers in this Oologist only, and do not care to purchase specimens of any kind unless very desirable and at low rates. Owing to an enormous amount of work before us during the next two months we are forced to make this announcement in order to save needless correspondence. FRANK H. LATTIN.

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Turkey Vulture.	.40	Am. Magpie.	.16

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—TO THE—

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OF NORTH AMERICAN BIRDS

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Albion, N. Y.

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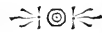
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## FRANK H. LATTIN, ALBION, N. Y.

# THE OOLOGIST.

VOL. VII.

ALBION N. Y., JULY, 1890.

No. 7

## The American Crossbill.

The American Crossbill, also commonly known by the name of Red Crossbill, is one of the great family of Finches (Fringillidae). It is a little larger than the common Linnet, and of a genus closely allied to the Grosbeak and Bull-finch. The genus is particularly characterized by the short, thick, round beak, of which the sides are inflated, bulging, and the tip of the upper mandible overhangs the lower one.

The Crossbills have long been celebrated on account of the peculiar form of their beak, from which they derived their name. The two mandibles are rather long, thick at the base, and much curved, so much so that they cross each other at the points, when the bill is closed.

In different individuals, even of the same species, the upper and lower mandibles are found variously directed to the right and left.

To examine the beak of one of these birds, one would say, it would prohibit its owner from picking up seeds or providing itself with food in any way, but, instead, it eats with all the ease and comfort of any of the straight-beaked birds, and enjoys itself like all its feathered fellows of the air. The food of the Crossbill consists of various seeds, such as the seed of the firs and pine, which it obtains by tearing apart the cones. They are also very fond of apple-pips. Setting on a tree where ripe apples are hanging, it attacks the fruit with its beak and in a few moments cuts a hole fairly into the core, from which it daintily picks out the seeds rejecting the ripe pulpy fruit in which they have been enveloped.

The male, as is the case with most birds, differs much from the female and

has the most beautiful plumage. The head and back are prettily colored with a variegated mixture of red, brown and green, all of which have a metallic lustre. The throat and breast are red, with here and there a few feathers of yellowish-green and drab, some of which are of a dim color, wings black, running to a brownish hue at the shoulders; tail, black; tail coverts, bright red; under tail coverts, drab and black; abdomen, drab; bill, black and half an inch long; legs and feet, black, short and strong.

Although nature has not provided the female with quite so beautiful a plumage, she is nevertheless, very pretty. The head, throat and breast are colored in a variety of green, red and yellow; back, red, green and black; tail, black; tail coverts, bright yellow; abdomen, drab; wings, black and white. The total length of this bird is not above six inches from tip of beak to extremity of tail. The tail has a very deep notch in the end, which is very conspicuous when flying.

The song of this bird is very simple and no particular quality to recommend it. The Crossbills generally build their nests in fir trees in a somewhat shaded retreat and lay from four to five delicate green eggs, spotted with varying shades of lavender brown, with here and there a heavy spot of dark purple-brown.

ROBERT R. SCORSO,  
Albion, N. Y.

## The Crested Grebe.

The Crested Grebe (*Podiceps cristatus*) is one of the oddest looking birds I ever met with. It is very common along the shores of Lake Superior. I spent three months in the Lake Superior region in the summer and autumn of

1885, and I found the Crested Grebes numerous at Marquette, and often watched them as they swam about the harbor within the breakwater, and found them decidedly interesting in their habits.

They appear to have lost much of their usual timidity and gained in wariness and cunning by frequenting the waters of this busy harbor, and they pay little attention to the huge lake vessels that are continually going and coming, simply moving out of the way of passing vessels. Oftimes I have seen them turn and follow close in the wake of a huge steamer as it came to or went from the wharf, soon returning, however.

Like most of the divers, its eyes is exceedingly keen, and its movements exceedingly rapid when occasion demands it. When standing upon the wharf, I have frequently had them swim within ten or twelve rods of me, always closely watching me, and, if they thought I was paying too close attention to them, they would suddenly dive beneath the waters only to reappear in some unexpected quarter, a little later.

They are usually seen in pairs and are monogamous, and I believe, mate for life, possibly the survivor will remarry after the loss of its companion.

WILFRED A. BROTHERTON,  
Oakland Co., Mich.

—————  
**Ichthy-Ornithological.**  
*Voracious Mountain Trout.*  
 —————

Two years ago while sojourning in the Willamette Valley in Oregon, another young companion and myself started one morning in the spring on a tramp with the intention of spending a day on Scoggin Creek, a tributary of the Tualatin River, in hopes of securing a fine lot of Mountain Trout

After plying the stream with our flies for a couple of miles with fair success,

we came finally to a large pool in which we could see several large trout swimming about in the clear mountain water, but with all our seductive art of fly-casting, we were unable to capture any of them, and finally sat down on a log in disgust to rest.

After sitting for some time we saw an old Wood Duck quietly swim out from under the shelving bank and start to lead her flock of young ones across the pool. We could see their little red feet splash in the water as they followed their wily parent. Just as they reached the middle of the stream, one large old trout made a charge right into the midst of the young ducks upsetting two or three in his mad career. The first fish was immediately followed by his comrades, each viciously attacking the young fowls in their turn. The young ducks evidently were very much surprised and terrified as they fled, diving in every direction, uttering their plaintive cry of fear. The fear of the young was apparently participated in by their mother as she moved around collecting her young, beating the water with her wings continuously.

Finally after some time, the trout seemed to desist in disgust as we had done in regard to their capture. The parent bird profiting by this respite gathered her flock before her and drove them down stream in great haste. The only solution my friend and I could offer for the novel action of these trout, was that the red feet of the young ducks bore a close resemblance to the Salmon eggs often used for fish bait by Oregon fishermen; or, that these old fellows had a relish for a practical joke, which indeed it resembled to an observer.

CLAY McNAMEE,  
Moscow, Idaho

### The Yellow-billed Cuckoo.

The Yellow-billed Cuckoo or "Rain-crow," as it is more commonly called, breeds more extensively in this vicinity than its near relative, the Black-billed. The two birds resemble each other very much, their only difference being shown by their names. I think the Black-billed is also somewhat smaller than the Yellow-billed.

The Yellow-billed Cuckoo is a very modest bird and is seldom seen outside the thicket where it builds its nest, lays its eggs and hatches, and rears its young. It does not confine itself to the forest, however, for I have frequently observed it in trees surrounding a human habitation, and know of one instance where it built and laid in a tree about ten or twelve yards from a house.

The plumage of the head, back and upper part of the tail, is of a light brown color; the throat, breast and lower part of the tail being white.

A peculiar feature of this bird, possessed also by some of the hawks, is that a row of feathers extends along each leg to the foot.

The nest is rarely ever built very high from the ground, but is usually placed in a low tree or bush, a partially dead tree, or one whose limbs are covered with moss, being chosen in preference to others. The nest is a frail structure, being highly constructed of twigs, dead leaves and moss.

This bird is very careless in regard to the number of eggs it lays. I have found nests containing two eggs, which were incubated, a sign that no more would be laid, and I have found nests containing six eggs, none of the eggs being exactly the same size.

The eggs are sky-blue in color, being frequently defaced by whitish stains, very difficult to remove.

The Yellow-billed Cuckoo is a very fearless bird, allowing a person to ap-

proach quite near before it forsakes its nest. It never utters a sound when driven from its eggs or young, but glides quietly off into the forest. And here is where it differs from other birds. Comparatively speaking, but few birds will abandon their nest to the despoiler of its contents without a noisy resistance, which, however, is generally fruitless.

The Cuckoo nearly always sits on its nest till the last moment. I have known instances where it was necessary to shake the tree before she would leave it. She frequently hovers in the tree where her nest is situated for a while, but eventually makes off into the woods, where, at intervals, her deep, guttural notes, appearing to come from deep down in the throat, can be heard. The notes of the Cuckoo differ greatly from the shrill calls of its feathered kindred, and is considered by many to be a sure sign of rain. This bird consequently being generally called Rain Crow instead of Cuckoo.

E. CARL LUTSAY,  
Marion Co., KY.

### Nesting of the Green Heron.

The Green Heron (*Ardea herodias*) which probably has as great a variety of names as any bird in the United States, (among which it will be recognized by such as Shite-poke, Indian Hen, Marsh Hen,) and, in fact, having a different name in every country village where there is a creek; is supposed by many persons to build its nest in dense swamps or over water; but from what experience I've had, I come to the conclusion that it prefers hilly land well away from the water.

It breeds quite sparingly in the District of Columbia, but I had the good luck to take three sets this season here. The first nest, taken on May 7th, was composed of coarse oak twigs, very frailly put together, placed in the inte-

lacing branches of two young oak trees fifteen feet from the ground, situated on a lonely hillside in the woods, at least a quarter of a mile from the water, or marshes, this set contained five fresh eggs.

On May 8th, "while among the pines," I took two more sets; the first one in a nest of more substantial build, placed in the fork of a small pine eighteen feet high, on a hill overlooking the river. It contained five eggs which were in the first stages of incubation. Then in a large pine nearly twenty-five feet up, in a nest placed on the end of a branch, I found a set of three, fresh.

The nest of the Green Heron, I find, is most always made of material from the tree in which the bird builds.

While collecting in May, I found a queer set which consisted of an egg each of the Cardinal Grosbeak, and Song Sparrow. They were in a Cardinal's nest, both fresh.

W. ALLISON MERRITT,  
Washington, D. C.

#### Back in their Old Haunts.

It is with pleasure that I am able to report the unusual number of insectivorous birds breeding here this summer. On one hundred acres of land situated in two plots, one of 60 acres on the sound and another of 40, two miles inland, all in the city limits of New York City, I find the following birds:

Robins quite plentiful, Wood Thrush one pair, Wilson's Thrush common, Catbird three pairs, Meadow Lark five pairs, Red-wing Blackbird about fifteen pairs, Purple Grackle seven pairs, Cowbirds three individuals, Song Sparrow plentiful, Chipping Sparrow a few, Baltimore Oriole one pair, Orchard Oriole one pair, King Bird three pairs, Red-eyed Vireo four pairs, Summer Red-bird one pair, Yellow-shafted Flicker six pairs, Yellow-billed cuckoo one

pair, Great Crested Flycatcher two pairs, Pewee two pairs, Crows common, Screech-owl one pair, House Wren two pairs, Spotted Sandpiper quite common, Green Heron two pairs, Night Heron one pair, Barn Swallow plentiful. I attribute the return of the birds to the scarcity of the English Sparrow; the blizzard of '88 killed a great many, but why they have decreased since last summer I do not know. Last fall I trapped about 400 and used them for trap shooting, but this year there are but five pairs breeding on my property, and there are very few in the neighborhood. I would like to see notes from other sections, saying whether the English Sparrow is on the increase or decrease, and I hope they will report the latter. W. I. S.,  
New York City.

#### Sialia-Mus.

I have to report the queer nesting of a pair of Bluebirds. On June 1st while collecting in a marsh, I saw a Bluebird go into a hole in the top of an old stump. When it came out I went and looked in but saw nothing but a little dry grass. On the 9th while again in the marsh, I again looked in the stump and saw a nest and two eggs.

I visited the stump for the third time on the 13th and found two more eggs had been laid, but the stump had meanwhile been inundated by heavy rains and the birds had deserted the nest. On pulling it out, I found under it a mouse nest with eight young mice, which had been drowned. The mice had access to their nest through a small hole in the bottom of the stump, and nothing separated them from the eggs, but the material of the two nests.

B. S. BOWEN,  
Ontario Co., N. Y.



# THE OÖLOGIST

A MONTHLY MAGAZINE DEVOTED TO  
ORNITHOLOGY AND OÖLOGY.

FRANK H. LATTIN, ALBION, N. Y.

EDITOR AND PUBLISHER.

NEIL F. POSSON, MEDINA, N. Y.

ASSOCIATE EDITOR.

Correspondence and items of interest to the student of birds, their Nests and Eggs, solicited from all.

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Albion, Orleans Co., N. Y.

Articles, items of interest and queries for publication should be forwarded as early in the month as possible and can be mailed to either the Publisher or the Associate Editor, as you may prefer.

ENTERED AT THE POST OFFICE AT ALBION, N. Y., AS SECOND-CLASS MATTER.

## Editorial Notes.

A large mistake was made in the printing of Mr. Merritt's article on the Saw-whet Owl in the June number.

By this error, the compositor put a tail eight inches in length on the Saw-whet Owl when it should have been but *three*. With an eight inch tail on an Owl only seven and one-half inches in length, the article appeared something like a rather "fishy" tale. We hasten to mention this error in detail as soon as we "saw it" before any of the more scientific ornithologists should begin to "howl" about some new variety of *Nyctale acadica*. (*Nyctale acadica longicauda*, perhaps.)

If those who send us queries could only use a little more pains, sometimes, in their descriptions, it would be much easier for us, and at the same time they would be more apt to receive satisfactory replies. For instance, we received one query which asked us to name a bird that had a red body and black wings and bill, and did not tell us a word as to size, whether it were as large as an Eagle or as small as a Hummer. Again, someone wanted to know what bird it was that laid an egg like a Field Sparrow's only larger, the nest being like a Grass Finch's.

A little pains would give us better descriptions and better results, and make the query column more of a success.

On the other hand, many of the queries received are marked by their conciseness of description, and it is pleasant to answer them.

## "What They Say."

L. Eber, Fairview, Mo., writes of a "crippled" egg of the Kingbird in his possession.

The egg measures 1 5/16 x 6/16 in.

The shape is very peculiar, it having in the middle, a kind of groove all around it. One end is much larger than the other, forming a kind of "step-off" in the middle instead of gradually growing smaller at the end. The other eggs in the nest were shaped normally.

W. M. Berman, Los Angeles, Cal., says:

"During the later part of April and the first part of May, I found in the same hole in a sycamore tree, four sets and one single egg of the Western House Wren. All the eggs were spotted alike.

I had to take the nest out to get the eggs, so they had to build a new nest for each set."

W. I. C., Norwalk, Conn., writes: "May 9th, I found a Phoebe's nest, attached to the side of a ledge, containing five Cow Birds' eggs, but not one

Phoebe's. The Phoebe was setting but I left them three days and then took them. Two were slightly and three quite badly incubated, and were all of the same size and color, evidently all being laid by the same bird."

June 12th, I found a Scarlet Tanager's nest containing three fresh eggs of that bird, and another which I am unable to name. It is immaculate white and the shell is very rough, and covered with bumps and ridges; and, altogether it is a very odd shaped egg, being very broad at the large end. It is about the size of the average Cowbird's. Is it a Cowbird's egg?

C. E. Pleas, Clinton, Ark., writes that the Chuck-Will's Widow is abundant in the valleys there, and that he is learning many interesting things concerning its habits. We expect to hear from him further concerning that bird.

J. C. Galloway, Montgomery, O., records a set of five eggs of the Sparrow Hawk, a nest of the Crested Flycatcher (rare there) and a nest with three eggs of the Green-crested Flycatcher as among his best finds for this season.

Among many sets of eggs taken by G. J. Kempen, Austin, Texas, are several sets of Bell's Vireo, comprising eggs of the Dwarf Cowbird. In this locality, the Red-eyed Vireo and the Cowbird form a never-failing combination, while there, the Bell's Vireo and Dwarf Cowbird seem to form a similar syndicate.

#### My first Nest of the Long Tailed Chickadee.

A friend and I went over into Fremont County, Iowa, on the 26th of April and a day or so afterward started up the river and pitched our tent (2) in a strip of timber. We stayed there one night and the next morning, after eating our breakfast we struck out. I had been walking about for nearly an hour, pounding on every stump and examining every bush and tree, when I saw a bird fly from a stump, and a charge of No. 12 shot stopped it. Looking around, I found the hole about ten inches from the ground. Opening it, I

found six beautiful pink eggs, laid upon a nest of hair moss and a few vegetable fibers. I took the eggs of course but they met with an untimely end, for upon reaching home I put them in some cotton, preparatory to blowing them, when my partner picked the cotton up and dropped all the eggs.

NORRIS H. REED,

Otoe Co., Neb.

#### Nesting of the Rough-winged Swallow

(*Stelgidopteryx serripennis*)

IN ELGIN COUNTY, ONTARIO.

Of the several species of Swallows peculiar to Ontario, the Rough-winged is probably the least known, not so much on account of its rarity, as its retiring habits, and association with its near relative the Bank Swallow (*Cotile riparia*), another bird of reserved habits, neither of them seeking the society of man to any extent.

As near as I can ascertain, they arrive here from the South about the 25th of April, being observed about the same time, and in the same localities as the Bank species. Operations in nest building are begun about the 20th of May, usually in sand banks along streams, one or two pairs mingling in with a flock of the others.

As their modes of nesting differ somewhat in many localities, my experience with them in that line might be of benefit and interest to some readers of THE OOLOGIST. The excavation is always larger, and extends inward a greater distance than those of the Bank Swallow. The nest situated at the end of the burrow is composed of coarse straw, and lined with fine grass, no feathers being used in its construction, which is such a common material in the nests of all the other members of this family.

The eggs, which are from five to seven in a set, are pure white, and considerably larger than those of the Bank Swallow.

F. L. FARLEY, Elgin Co., Ontario.

## Our Question Box.

Queries to be answered in these columns should be written on a postal or slip of paper—never mix them in your letter when writing about other matters.

J. A. L., Clarksville, Tenn.—The eggs of the Lark Bunting, as well as those of the Black-throated Bunting or Dickcissel very closely resemble the eggs of the Bluebird. What the eggs of any of these birds were doing in a Brown Thrasher's nest, we are at a loss to understand.

I. S. C., Paducah, Ky.—Think your nest and eggs are simply English Sparrows.

Does anyone, anywhere, know of a bird that is "black and red," which is called "Rink" from its note?

F. V. P., Las Vegas, Nev. 1.—The bird about the size of a House Wren, with a light yellow head, building a globular nest of thorny sticks in the ends of the branches, the eggs being light blue with brown spots, is the Verdin or Yellow-headed Tit.

2. Do any of our readers know of a bird about the size of the Robin and much like it in appearance, only having a lighter breast and a small top knot. It builds in holes and ledges along cliffs and lays four eggs usually. Pinkish-white, about the size of a Bluebird?

W. E. G., Galveston, Tex.—Your ball-shaped nest suspended to the rank grass of a marsh, containing five white eggs speckled with red-brown, and belonging to a small bird with yellow-edged wings, doubtless is that of the Seaside Sparrow.

J. W. A., Allegan, Mich.—1. The "Yellowbird," with black crown, wings and tail, is the American Goldfinch. Its eggs are white with a bluish tinge, unspotted.

2. The "Yellowbird" of a uniform yellowish color throughout, is the Yellow Warbler. Its eggs are white or greenish-white, spotted, usually in a wreath around the larger end, with amber-brown, blackish and lilac-gray.

V. N. M., Mt. Union, O.—The young males of the genus *Aythya* have the feathers of the back edged with bay.

A. O. G., Lawrence, Kans.—The only safe means of distinguishing between the nests of the Bank and Rough-winged Swallows, is by securing the parent bird.

J. V. C., Marathon, Ia.—The Wilson's Phalarope is about nine inches long, light-gray above, wings brown. A dark stripe through the eye, becoming purplish-chestnut on the sides of the neck. Upper tail-coverts and under parts, white.

C. M. G., Sacramento, Cal.—Your "Red-headed Linnet" is the House Finch—A. O. U., No. 519.

A. S., Linn Co., Ia.—The habitat of the Western Red-tail in the United States is from the Rocky Mts. to the Pacific Coast.

L. R. B., Cleburne, Tex.—Your "Mexican Canary" having a fiery-red breast, black head and greenish-blue wings, is doubtless the Painted Bunting or Nonpariel.

A. L. T., Newark, N. Y.—All of the descriptions you give are very incomplete. The set of nine eggs probably belong to one of the Rails, perhaps the Virginian. The Cherry-bird is without doubt, the Cedar Waxwing; while your "Guinea Woodpecker" may be the Downy, although we wouldn't say so definitely.

C. A. T., Petaluma, Cal.—Your bird with breast and head of red, laying from four to six light blue spotted at the larger end with black, is doubtless the House Finch.

G. H. G., Baltimore.—The description of your bird is like that of the female Scarlet Tanager.

E. E. H., Cleveland, O.—The eggs of the English Sparrow vary greatly; and that bird quite frequently nests in holes in trees. Could your eggs not possibly be of this bird? As to your second nest, we can hardly judge from the description given. We know of no egg so small as to be only one-fourth of an inch in length.

Name mislaid.—Your description of bird is insufficient. It is probably either the Lark Bunting or the Black-throated Bunting.

J. H. S., Webster, Mass.—1. Your egg of light-blue spotted with brown and black, nest like a "Chippy's," composed of needles and placed in a pine tree, the bird being quite robust, is doubtless that of the Purple Finch.

2. See answer to first part of E. E. H.'s query in this column.

W. A. B., New Sharon, Ia.—Your bird with a blood-red body, black wings and tail, may be a Scarlet Tanager; although you told us nothing of its size.

L. S. D., Netherwood, N. J.—1. Your bird with greenish-brown back, yellowish-brown wings with white spots, bright yellow under the shoulders, white superciliary line, and short, thick and powerful bill, the eggs being blue spotted with yellowish-brown, is the female Rose-breasted Grosbeak.

2. Cannot judge without description of the bird.

G. A., Auburndale, Mass. and others.—Your descriptions are insufficient. A description of the bird is generally necessary in order to get any idea as to the identity of nests and eggs:

-----  
Great Horned Owl.  
(*Bubo virginianus*.)  
-----

Feb. 17, '89, being a pleasant day, I started out to pay a visit to my Owls' nests.

My course, as planned in former years, lay through several large "strips" of heavy timber.

A tramp of two miles brought us to the first nest which seemed to be deserted. Another mile and we met with the same disappointment at the second nest. This was discouraging, but as there was another nest two miles farther on, I continued my tiresome tramp bringing up, finally, under the outspreading branches of the old hol-

low maple which was the home of my "hooter." All around were the freshly disgorged bits of fur and bones, but the cavity in the tree contained nothing.

Was I too early? This was the question which arose, but while I was eating a lunch, the mystery was explained. Three boys came along and informed me that a "Hoot Owl" had been killed in the woods a few weeks before.

After making my business known, I was informed by one of the party that he had often heard, during the winter, an Owl hooting in a thin strip of woods nearly opposite his house. I knew the very spot, and as it was only a few steps out of my route homeward, I started off for the place at once.

Arriving at the outskirts of the grove-like wood, I examined the first hollow oak, but found no Owl's nest. The second tree, however, showed signs of "life" as there was a feather adhering to a splinter near the cavity, which was about forty feet from the ground. After resting a few minutes, I began the ascent, climbing around on the opposite side of the tree as I went up.

When within three feet of the nest I looked up and could see the Owl's tail projecting through a large crevice. Not wishing to frighten her very much, I gave her tail a gentle jerk which caused her to slowly leave the nest and alight on a neighboring tree.

The nest contained only one egg, and fearing the nest was not complete, I did not remove it.

On the afternoon of the 20th, I returned to collect the set which I knew by this time would be complete. This was a cold cloudy day and as I neared the tree the old Owl left the nest.

Climbing up I was very much disappointed to find the number of eggs had not increased.

The nest was a new one, composed of a mass of leaves, twigs and bark nicely hollowed out and lined sparingly with feathers.

The diameter of the inside of the nest was about eight inches and the depth about one and a half inches.

J. WARREN JACOBS.  
Pittsburgh, Pa.

#### Some Unusual Happenings.

On the last day of April, several years ago, as I was passing a small piece of white oak timber, I saw in a fork of one of the trees about thirty feet up, a Crow sitting on her nest. I concluded to see what the nest contained. On reaching it I found five eggs which proved to be fresh. After I had taken them out I noticed quite a bunch in the bottom of the nest. I removed the lining and there found another Crow's egg. The single egg was in a well lined nest, another lining was placed over it and the five eggs laid.

May 16, 1884, I found five eggs of the Bluebird in an old Golden-winged Woodpecker's nest in the trunk of an apple tree about two inches in diameter and only five feet from the ground. The nest was lined in the usual manner with soft grasses and some feathers and also contained one egg of the Golden-winged Woodpecker. I took the Bluebirds' eggs and left the Woodpecker's, but did not disturb the nest. On visiting the nest again, the 18th, the female flew from the nest. On looking into it I saw there were two eggs. On the 20th, I again went to the nest, but some boy had torn away one side of the tree and taken the eggs.

May 16, 1885, I shot a pair of Golden-winged Woodpeckers, for mounting, from a decayed maple in our grove, where a brood was raised the year before. Another pair were at work on an oak a few rods away. Evidently they had a hard task for they had been working a long time, but had not completed their nest.

On the 18th, I noticed this second pair on the tree on which the old birds were shot. While watching them one

of the pair went into the old bird's nest and soon came out with an egg on its bill and flew away.

May 28th, these birds had laid six eggs and on the 2nd of June there were eight eggs in the nest.

Last year I found some Hawks' nests with incomplete sets. I left them for a few days. On going to them with the expectation of finding full sets, I found they were empty.

This year I concluded to try an experiment if a chance offered.

April 14th, found a Red-shouldered Hawk's nest in the fork of a white maple about thirty feet from the ground, with two eggs in it. The next day went to it again and found there were three eggs.

I took two hens' eggs with me about the size of Hawks' eggs and spotted in a careless way, with reddish brown. There was not much resemblance to the original eggs. I put the two into the nest and took out the Hawks' eggs.

A week later visited the nest again and found the old bird on. On climbing to the nest found the two hens' eggs still there and that she had laid another.

April 17th, found a Broad-winged Hawk's nest with one egg. Swapped a hen's egg with her two days later, put in another hen's egg and took another Hawk's egg. A few days later went again to the nest, but someone had robbed it. However, by the exchange business I secured a nice set of two.

E. C. ELLIOT,

Bradford, Mass.

#### A Collecting Trip at Pewaukee, Wisconsin.

A few days since, I went over to Pewaukee in this county, and in company with a friend took an afternoon trip across the big marsh at that place.

While on the way to the marsh, we found a Flicker's nest containing a set of six fresh eggs. The nest was in a living oak tree and instead of having

been excavated by the bird was a natural cavity in a knot about twelve feet up. The bottom of the hole which was as big around as a peck measure was covered with leaves and three eggs were laid on the leaves.

After packing the Flicker's eggs we didn't find any more nests till we reached the marsh, when we had not gone three rods when a bird flew up and then fluttered along the ground and we immediately saw that she was a Wilson's Phalarope, after a few minutes search we found the nest containing four fresh eggs. After packing the Phalarope's eggs we walked clear across the marsh and half way back again before we found a set worth taking. But when about half way home we had to go near a place where we, in company with Mr. B. F. Goss found a set of five Marsh Hawks, in 1886. I thought that maybe they had a nest there now, so I went over that day and sure enough up flew the Marsh Hawk. I went up to the spot she flew from, and there lay a set of five eggs. The nest was a little pile of grass about two feet in diameter and eight inches high with a small cavity in the top to hold the eggs. The next and last set was another set of four Wilson's Phalarope.

The next day we went on the lake and obtained some fine sets the most curious of which was a set of five Albino Swamp Sparrows, perfectly identified.

DOX CURRIE,

Waukeshaw Co., Wis.

-----  
**Pallas' Cormorant.**

*Phalacrocorax perspicillatus.*

Newspaper clippings are sometimes valuable. The following clipping taken from some paper, we know not what and for which we are indebted to W. I. Comstock, Norwalk, Conn., is valuable in that it reminds us of an overlooked and forgotten species:

"Much attention has been drawn to

the Great Auk in recent years by the astonishing prices paid by collectors for its skins and eggs, while Pallas' Cormorant, the extinction of which in the North Pacific corresponds to that of the Great Auk in the North Atlantic, has been scarcely heard of at all. Yet Mr. Leonhard Stejneger, of the Smithsonian Institution, states that this bird was the largest and handsomest of its tribe. Only four specimens are known to exist in museums, no one possesses its eggs, and the first bones found and preserved were obtained by Mr. Stejneger in 1882 near the northwestern extremity of Behring Island."

Referring to Cones' Key, to learn more about this overlooked bird, we find the following:

"Deep lustrous green, above and below, with blue gloss on the neck, and rich purplish on the scapulars and wing-coverts, the dorsal feathers not sharp-edged nor bordered, as in all the foregoing 'species'.

Shafts of tail feathers (said to be white; if this holds, it is a unique character among our species. Adult with coronal and occipital crests (not lateral paired crests); a white flank-patch in the breeding season; face and neck with long sparse straw-yellow plumes; sac orange, heart-shaped; bill blackish. Large: length 36.00; wing 13.00; tail 7.00? 9.00? tarsus 3.00; bill (along gape?) 4.00, very stout, two-thirds of an inch deep at base. North Pacific Coast. I have not seen this species, which seems to be well marked. There are no known specimens in this country, and none of the ornithologists who have lately visited Alaskan shores have found the bird."

-----  
**Interesting Extracts from an 1890 Note-Book.**

May 18th. To-day I collected a fine set of three eggs of the Summer Red Bird, being my first set for this season.

June 13th. Collected a set of five

eggs of the Red Headed Woodpecker, nest in an old oak right in the heart of the city. This set deserves special mention as it is rather a peculiar one.

Eggs No. 1 and 2 are perfectly fresh and have that unmistakable pinkish tinge of newness.

No. 3 and 4 are dark and on blowing I find incubation advanced in one and in the other the young bird was almost ready to break its shell.

No. 5 however, is the queerest of the lot, insomuch as it contains—nothing. An egg laid, containing nothing but air and about two grains (by weight) of yolk. My boy exclaimed on picking it up, "humph, here's an egg laid already blown."

No. 2 was unusually large, measuring  $1.06\frac{1}{4} \times .76$ . The shell was rough and had little bunches of shelly matter scattered over the surface and it was only about one-half filled. With all, it was the most remarkable set I have ever taken. (Note: In 1888, I collected a set of one egg out of another tree near this one. There was but the one egg which measured  $.80 \times .62$ .)

June 16th. To-day, I collected a fine set of five eggs of the Great Crested Flycatcher, nest in a round trough, through which wires used to run during shooting matches, composed of pine straw, leaves, seeds, bits of rope and fur; also a little cotton and hair and the inevitable snake skin, "Par. necessity."

S. A. TAFT,  
Aiken, S. C.

#### A Flicker Moving its Household Effects.

On the morning of May 19, 1890, I started for what the boys, around where I live call the country, after reaching a clump of trees some two or three miles from the city, I sat down to rest, at the foot of a large yellow birch. I had not been sitting there very long before I was startled from my meditations by the cry of a Yellow Hammer

directly above me, and on looking up I saw the old fellow about to enter a hole in the decayed terminal branch of the birch.

Soon after he reappeared with what I at first supposed to be a chip, in his beak. This supposed chip I soon perceived to be an egg, which he held lengthwise. After looking around, he flew to a tree about a fourth of a mile distant. I being determined to rescue the remaining eggs, immediately climbed the tree, only to find that all the eggs had been removed. After descending I started for the other tree, upon whose top-most branches I could see the parent Flickers. On reaching it I perceived that the reward of possibly a half dozen of eggs would not warrant the task of climbing, as the tree was barren of limbs for the greater portion of its height.

C. RETRECHT,  
Cleveland, O.

#### Hairy Woodpecker and Potato Bugs.

Last summer, potato bugs covered every patch of potatoes in Marathon county, (being my home county,) Wis. One of my friends here, found his patch an exception, and therefore took pains to find the reason, and observed a Hairy Woodpecker, making frequent visits to the potato field and going from there to a large pine stub a little distance away.

After observing this for about six weeks, he made a visit to the pine stub and found, on inspection, a large hole in its side about fifteen feet up. He took his axe and cut down the stub, split it open, and found inside, over two bushels of bugs. All had their heads off and bodies intact. Now why did the Woodpecker carry the bugs whole to the tree and only bite off and eat the heads, which could have been done in the potato field?

V. A. ALDERSON,  
Marathon Co., Wis.

### An Unknown Nest.

On the 20th of May, I was looking for the nests of Wilson's Thrush in a piece of brush near here, when I saw a bird flit away from a bush just ahead, which, from its general resemblance, I called Wilson's Thrush, so did not watch it.

But, upon going to the nest, I wished I had, for it contained one egg measuring .56 x .43, spotted quite thickly with brown on a light blue ground.

The nest was placed about a foot from the ground between four upright twigs and resembled the usual nest of Wilson's Thrush, but was smaller. I left the nest and going back four days later, found another egg, colored like the first, but spotted, thicker, measuring .63 x .47. It had the appearance of having lain there several days, having settled into the bottom of the nest. No bird was seen this time.

Now, were they runt eggs of Wilson's or the Olive-backed Thrush, and, if Wilson's, is there any record of spotted eggs of Wilson's Thrush being taken: would be glad to hear, through the *Oologist*, from anybody who can give information.

ERNEST H. SMITH,  
Mourne Co., N. Y.

### The Eggs of Audubon's Warbler.

Mr. Samuel B. Ladd, of West Chester, Pa., sends us the following description of the eggs of Audubon's Warbler from a series of sets in his extensive collection:

"The eggs of Audubon's Warbler are of a bluish-white background, with markings more like the Maryland Yellow-throated than the Yellow Warbler and some specimens would at first strike you as more like Orchard Orioles. Mine were all collected in Colorado and I have the nests, which is a great addition to their value."

### A Cheap Collecting Box.

In reply to Mr. A. Dronet's query in the March *Oologist*, I would say that I have collected eggs now for 5 years and the cheapest and best collecting box I have found is an old plaster box. Take and make two holes one each side of the seam and put a piece of wire through in the form of a ring, to which you can fasten a strap or string and put it over the shoulders in the same way as a fish basket. I have found them convenient in climbing for crows' nests and the like, and also they will hang neatly under the coat.

H. F. M.,  
Quebec, Vt.

### Book Review.

Key to North American Birds. ELLIOT  
COUES. Fourth edition. 1890.

In presenting the fourth edition of this standard work, the only change instituted by the author over the previous edition, is the addition of a Second Appendix.

It will be remembered that the "First Appendix," published with the previous edition, presented in double columns, the differences between the Key List of 1884, and the *Union List* of 1886, introducing such changes as the author saw fit to make in that edition of 1887.

The "Second Appendix" notes every further change reported by the Union's Committee from 1887 to January 1890 inclusive.

Upon most of these changes, the author expresses no individual opinion, presuming the judgment of the Committee to be final. But the names of species and subspecies which he is fully prepared to admit to the Key as additions or emendations are printed in thick type.

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Pied-billed Grebe.....	10	Mourning Dove.....	05	Fish Crow.....	25
Tufted Puffin.....	1 00	White-winged Dove.....	50	Dwarf Cowbird.....	20
Cassin's Auklet.....	3 00	Ground Dove.....	25	Yellow-headed Blackbird.....	05
Kittiwake.....	45	Inca Dove.....	75	Red-winged Blackbird.....	02
Glaucous Gull.....	85	Mississippi Kite.....	10 00	Bicolored Blackbird.....	10
Iceland Gull.....	1 50	Red-tailed Hawk.....	60	Tricolored Blackbird.....	20
American Herring Gull.....	20	Western Red-tail.....	75	Meadowlark.....	12
Laughing Gull.....	20	Red-shouldered Hawk.....	50	Western Meadowlark.....	12
Franklin's Gull.....	75	Fla. Red-shouldered Hawk.....	1 25	Hooded Oriole.....	50
Gull-billed Tern.....	15	Bald Eagle.....	5 00	Arizona Hooded Oriole.....	50
Caspian Tern.....	50	American Sparrow Hawk.....	25	Orchard Oriole.....	10
Sooty Tern.....	40	Am. Long-eared Owl.....	35	Baltimore Oriole.....	10
Forster's Tern.....	15	Short-eared Owl.....	1 25	Bullocks Oriole.....	15
Common Tern.....	08	Florida Screech Owl.....	50	Brewer's Blackbird.....	05
Least Tern.....	08	Texas Screech Owl.....	50	Purple Grackle.....	04
Sooty Tern.....	35	California Screech Owl.....	50	Bronzed Grackle.....	04
Black Tern.....	12	Great Horned Owl.....	1 25	Great-tailed Grackle.....	20
Noddy.....	75	Hawk Owl.....	1 00	House Finch.....	06
Black Skimmer.....	12	Burrowing Owl.....	25	Arkansas Goldfinch.....	20
Pomarine.....	75	Road runner.....	25	Lawrence's Goldfinch.....	25
Manx Shearwater.....	1 00	Yellow-billed Cuckoo.....	10	Chestnut-collared Longspur.....	75
Audubon's Shearwater.....	2 00	Belted Kingfisher.....	20	Lark Sparrow.....	05
Brown Pelican.....	25	Hairy Woodpecker.....	50	W. Lark Sparrow.....	05
European Teal.....	20	Red-cockaded Woodpecker.....	25	Gambel's Sparrow.....	05
Blue-winged Teal.....	25	Red-headed Woodpecker.....	08	Chipping Sparrow.....	25
Barrow's Golden-Eye.....	1 00	Red-bellied Woodpecker.....	50	Western Chipping Sparrow.....	02
Old-Squaw.....	40	Golden-fronted Woodpecker.....	75	Field Sparrow.....	10
Harlequin Duck.....	1 25	Flicker.....	03	Black-tufted Sparrow.....	50
American Scoter.....	2 00	Red-shafted Flicker.....	10	Song Sparrow.....	02
Great White Heron.....	1 25	Chuck-wills-widow.....	1 50	Desert Song Sparrow.....	50
Black-crowned Night Heron.....	10	Nighthawk.....	50	Heermann's Song Sparrow.....	12
Yellow-crowned Night Heron.....	25	Western Nighthawk.....	50	Samuel's Song Sparrow.....	08
Limpkin.....	1 25	Chimney Swift.....	15	Towhee.....	10
Clapper Rail.....	10	Costa's Hummingbird.....	1 00	Spurred Towhee.....	25
Florida Gallinule.....	12	Scissor-tailed Flycatcher.....	10	Oregon Towhee.....	40
American Coot.....	10	Kingbird.....	03	Californian Towhee.....	08
Red Phalarope.....	1 00	Arkansas Kingbird.....	08	Cardinal.....	05
Northern Phalarope.....	50	Cassin's Kingbird.....	25	Texas Cardinal.....	50
Black-tailed Godwit.....	40	Ash-throated Flycatcher.....	25	Rose-breasted Grosbeak.....	15
Bairdian Sandpiper.....	40	Crested Flycatcher.....	12	Black-headed Grosbeak.....	20
Spotted Sandpiper.....	15	Phoebe.....	05	Blue Grosbeak.....	25
Long-billed Curlew.....	75	Black Phoebe.....	20	Indigo Bunting.....	08
Willet.....	40	Wood Pewee.....	15	Lazuli Bunting.....	20
Killdeer.....	20	Western Flycatcher.....	25	Painted Bunting.....	10
Bob-white.....	10	Acadian Flycatcher.....	20	Black-throated Bunting.....	05
Florida Bob-white.....	15	Little Flycatcher.....	40	Scarlet Tanager.....	25
Texas Bob-white.....	10	Trout's Flycatcher.....	20	Summer Tanager.....	20
Ruffed Grouse.....	15	prairie Horned Lark.....	20	Purple Martin.....	15
Willow Ptarmigan.....	75	Desert Horned Lark.....	20	Chil Swallow.....	04
Rock Ptarmigan.....	1 00	Ruddy Horned Lark.....	35	Barn Swallow.....	05
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WANTED.—The best offer of Eastern Bird Sets for \$1000 worth of California Bird Eggs, in sets.—W. BERMAN, 169 Ingraham St., Los Angeles, Calif.

MOUNTED—Quail, Flicker and other Birds, also Skips and Eggs, or a good Rifle, Gun or Revolver, Eggs, Cabinet or others. W. INGRAM, Oshkosh, Wis.

I have Bird Eggs which amount to \$1350 at catalogue prices, four pairs of Rabbits and a Pet Coon, for exchange. What have you to offer? LOUË MILLER, Frankfort, Ind.

I want the following Back Nos. of the Oölogist:—Apr., '86; June, Oct., Nov., Dec., '89; June, '88. I have *Young Oölogist* back Nos. to exchange. Write, T. E. STUART, Corning, Iowa.

EXCHANGE.—T. Bily's "Book of Birds" and the "King's Men" cloth, unsold, for Davie's "Nests and Eggs of North American Birds" cloth. W. E. AIKEN, Benson, Vt.

I have a good many Eggs of the Land Birds of Georgia. What have you to exchange? G. R. PALMER, Washington, D. C.

I want to exchange a Horned Lark, 27 and 28, Revolver, 2 pairs Chipping Sparrows, that will hold 10 sets, and Corvidae, for a set, to May 1st, for First-class Eggs, with data or for best offer. F. B. WILSON, Corning, Iowa.

EXCHANGE—sets with the following in sets: 316, 106, 112, 111, 156, 4, 1, 105, 107, 10, 511b, 613, 622a, 701, 705, 721, 761, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000. Address WILLIE BRYAN, New Sharon, Iowa.

TO EXCHANGE—First-class, Third-class Eggs for a pair of Chimney Swifts, a pair of Sapsucker, "Gull" and "Towhee" Tools. Good offer.—Address WALTER W. GRANGER, W. Prospect St., Rutland, Vt.

TO EXCHANGE—Magic Egg, set with polyoptic attachment, and 100 sets of 12, 50 for African Ostrich Egg, or other Species. Sea Birds preferred, as 2 N. Am. Histories and Eggs, for Snipe.—What have you? J. MERTON SWAIN, East Milton, Me.

WESTERN Eggs in sets, or 100 sets, for same. Send list of your sets, to receive mine.—No stamps or other offers wanted. A. M. SHELDON, 101 Broadway, Los Angeles, Cal.

TO EXCHANGE.—For 20 sets of set of first-class Birds' Eggs in sets or single. For data, I will send prepared a small iron, top bottle of Stones from the "Four Lads of 1847." Address, O. E. CROOKER, 621 Jackson St., Madison, Wis.

WANTED.—The Address of the reliable collectors, residents of Iowa, who make any of the following a specialty:—Fossils, Alcoholics, Specimens, Insects, Wood, Zoology, Fossils, Minerals. F. LEON, 426 1/2 LIBERTY Des Moines, Iowa.

FOR EXCHANGE.—A Collection, of 61 varieties of first-class Eggs (59, 282, etc.) value \$5.81; for best offer books on Ornithology, Florent Rifle, Egg Cabinet or Bonis Baguet preferred; also one Egg each of Central American Ocellated Turkey and Yucatan Crypturus and a collection of 1800 worthless of Stamps, for exchange. HARRY S. DAY, 175 Buckland Ave., Fremont, Ohio.

WANTED.—Davie's Latest Key, cloth. Will give the following first-class Snipe, Bird and Reptile Eggs, Birkway's Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100. Also Eggs to exchange. NICKOLAS V. LINDEN, Island Lake, Orange Co., Florida.

**EXCHANGES AND WANTS, Continued.**

Have you read Lattin's "Exchange Extraordinary" in this Oologist?

Collection of first-class Eggs, in sets, Singles and Pairs, mostly California Species, including Hawks, Owls, Flycatchers, Hummingbirds, etc., amounting to over \$25.00 by Lattin's 1890 price-list. Will exchange for good Brench-loading Shotgun, Typewriter, Rifle, Self-inking Press, Type or other desirable offer. All letters answered. CHAS. TURTON, Box 359, Los Angeles, Calif.

WANTED.—Original Sets, with data, of the following A. O. U. Nos.: 2067, 3673, 181, 2881 (with nests) and many others. Have for exchange desirable sets of California Eggs and first-class Bird Skins. Send lists of sets and first-class Skins. L. ZELLNER, 839 W. 18th St., Los Angeles, Cal.

TO EXCHANGE.—A Printing outfit complete, consisting of one hand press, one foot press, Job Type, Rules, Replet, Furniture, etc., complete, for Safety Bicycle. A. M. EDDY, Albion, N. Y.

TO EXCHANGE.—Carefully prepared Skins and Skulls of Birds and Mammals, Fossils, Woods, Minerals, Insects and Curiosities of this locality for the same. Indian and War Relics and Bird Eggs of other localities—stamps, Coins and Oologist prior to August, 1888. W. E. SNYDER, Beaver Dam, Wis.

WANTED.—A 18-inch Rubber Tire, Steel Spoke Bicycle in good condition. Will give the following books in exchange: Maynard's "Birds of Eastern North America" (\$18.00), Langille's "Our Birds in their Haunts" (\$3), Jordan's "Manual of Vertebrates" (\$2.50), Maynard's "Eggs of N. A. Birds" (\$2), Davie's "Nests and Eggs" (\$1.75), "Am. Ornithology," 3 vols., Edinburgh, 1831, Hornaday's "Two Years in the Jungle" and Samuel's "Northern and Eastern Birds" (\$5). All books are in excellent condition. Address, THAD. SURBER, White Sulphur Springs, W. Virginia.

TO EXCHANGE.—First-class Singles and Sets, with data, to exchange for other first-class Sets. Send list and receive mine. All letters and cards answered. RALPH ARNOLD, Pasadena, Cal. [63]

IMPORTANT.—I care to make exchanges during the next 30 days as per offers in this Oologist, only, and do not care to purchase specimens of any kind unless very desirable and at low rates. FRANK H. LATTIN.

WANTED.—Offers for pair of Climber-strapped ready for use, Water birds Eggs, sets or singles preferred. Address, R. B. White-head, Westfield, N. J.

TO EXCHANGE.—Carrier Pigeons \$2.50 per pair, Key and Sounder \$1.00, Magic Lantern and Slides \$1.25, Siberian Fossils for others of eggs. A. V. Thomson, Decorah, Ia.

TO EXCHANGE.—To every person who sends me 25c worth of Eggs, I will send a patent broom holder and directions for getting agency, send it for Postage, T. E. Stuart, Corning, Adams Co., Iowa

COLLECTORS.—We will give the worth of first-class eggs for every 10c worth of U. S. or Foreign stamps sent me. Stamp catalogue of less than 2c not wanted unless in lots of 50 or over. Middlesex Stamp Co., Natick, Mass.

WANTED.—To buy first class eggs in sets with full data. Parties having such for sale cheap. Address, Fred C. Van Valkenburg, Box 15, Topeka, Kansas.

**IMPORTED JAPANESE**

AND INDIAN SILK WORM EGGS FOR SEED.

In Silk culture, Different species, also the celebrated Madras Silk Cocoons warranted to be raised successfully in this country. Directions given how to raise them profitably. Prices low

PROF. CARL BRAUN,  
NATURALIST.

BANGOR, MAINE.

**TELEPHONES** for private lines. Sold outright, right. Circulars free. Address, HARBELT TELEPHONE CO., 132 W. Van Buren St., Chicago, Ill. Circulars free. Agents wanted.

**WM. G. SMITH,**  
—COLLECTOR OF—

Birds, Mammals and Eggs,  
LOVELAND, COLORADO.

I make a specialty of mailing birds same day as skinned, or sent in the flesh after subjecting them to a preservative preparation. Enclose stamp for Price List.

**FOR SALE, A RACCOON** with three young ones. The young coons are about 11 weeks old. Will sell for best offer in cash of first-class birds' Eggs. Address, W. S. TARBOX, Canobie Lake, N. H.

**AT THE GREAT**  
**International Fair,**  
—TO BE HELD—  
**AT DETROIT, MICHIGAN,**  
August 26 to September 5,

Frank H. Lattin will have a "load" of Birds' Eggs, Sea Shells, Corals, Natural History Specimens and Curiosities of all kinds.

Duplicate Specimens will be sold at surprisingly low prices.

Lattin will personally attend the mammoth exhibit during the Fair and would be pleased to meet any of his patrons.

Should you visit the Fair, do not fail to visit Lattin's exhibit, which you will find on the second floor, at the south end of Main Building (same location as in '89). The Exhibit will occupy 500 ft. floor space with 50 ft. frontage.

# © Exchange Extraordinary. ©

This Offer Expires on August 25, 1890.

I want, at once, the following first class eggs, either in singles or in sets, in exchange at 1800 prices, or if in sets, I will allow 10 per cent. above these prices, in exchange for the articles mentioned below. Eggs taken in large or small quantities. No exchange amounting to less than \$1.00 can be "battered with" unless 10 cents additional is enclosed for return postage and packing. If you have any of the rarer species to offer, send lists. Species wanted, Ridgway's Nos.:

2, 26, 41, 42, 47, 51, 56, 93, 99, 115, 128, 168, 181, 193a, 197, 198, 198a, 201, 202, 217, 231, 236, 237, 245, 247, 248, 251, 251, 258, 260, 263, 264, 271, 272, 277, 278, 278d, 282, 293, 304, 306, 315, 320, 325, any of the Humming-  
47, birds, 351, 353, 354, 357, 361, 382, 385, 388, any of the Owls, Hawks, Eagles or Vultures, 465, 475, 482, 483 any of the Herons, 497, 498, 501, 513, 520, 525, 555, 569, 571, 572, 574, 578, 582, 583, 601, 610, 613, 618, 619, any of the Cormorants, 619, 670, 694, 666a, 668, 673, 681, 723, 729, 733, 790, 791, 793a.

We will accept any species not mentioned above at ONE-HALF 1890 prices.

In return for the above, I will give any of the following articles, specimens or supplies at the prices quoted.

## SUPPLIES.

No. 1, 8-100 Egg Drill.....	\$ .08
" 2, 12-100 ".....	.12
" 3, 15-100 ".....	.15
" 4, 18-100 ".....	.18
" 5, 21-100 ".....	.20
100 Exchange and Return Ex. Sheets.....	.50
" Order Sheets.....	.45
" Billheads.....	.45
" Labels, No. 11.....	.18
" Taxidermist's Labels, No. 12.....	.20
Oologist's Handbook.....	.25
Handbook on "Insect Collecting".....	.15
17 Back numbers Oologist.....	.75
Oologist without premium, from June to Jan. '91.....	.50
Card for one 2-word EX. Notice in Oologist.....	.35

## SPECIMENS.

Club-spined Urchin, very fine.....	\$ .50
Egg Case, of Leviwhale.....	.25
Lucky Tooth of Codfish.....	.25
Starfish, Martha's Vineyard, fine.....	.25
Pod of Sabre Seal, very curious.....	.35
Rapah or Beetle Nut.....	.15
Brown-banded Sea Bean.....	.10
Red Sea Bean.....	.04
Gray Sea Bean.....	.03
Trilobite ( <i>Calymene Niagarensis</i> ) poor.....	.25
Scaphites, from Black Hills, choice, desirable.....	.30
Resurrection Plant.....	.15
Barnacle, Pacific, choice double specimens.....	.25
Polished Agate, Pendant.....	.25
Indian Pottery, fine specimen.....	.25
Sea Fan, 6 in., extra fine.....	.35
Alligator Tooth, fine.....	.25
100 Foreign Stamps, all different.....	.30
Sea Horse, very fine.....	.50
Fossil Polyp Coral or "Petrified Horn".....	.25
Fossil Sea Urchin.....	.25
25 Wild Potatoes.....	.40
12 ".....	.25
Egg of Hammerhead or Leopard Shark.....	.25

## SHELLS.

All Extra Fine Bright Specimens.

Tellina radiata.....	\$ .10
Oliva inflata.....	.10
Cyprea lynch.....	.10
" helvo.....	.10
" isabella.....	.20
" talpa.....	.50
" moneta (Money Cowry).....	.05 to .15
Mercenaria lalteri.....	.15
Purpura patula.....	.15
Murex pudicolor.....	.15
Oliva fushornis.....	.15
" litterata.....	.15
Calton squamosus.....	.15
Fissurella Barbadensis.....	.10
Strophia glans.....	.10
Deudalium entalis.....	.05

Strombus bituberculatus.....	.37
Perna ephippium.....	.27
Apollonia pectinifera.....	.10
Neftia peleronia.....	.10

## NOVELTIES.

Little Brown J.....	\$ .05
Collectors' Puzzle w/inside.....	.15
Bird Warbler.....	.30
Box Parrot's Egg of Eggs.....	.15
20 Best assorted Fish Bones.....	.20
Joker's Photo Camera.....	.25
36-page Illustrated Handbook telling all about The Uses of Tissue Paper Flowers, etc.....	.15

## BIRDS' EGGS.

Black throated Sparrow.....	.75
Texan Cardinal.....	.50
Dwarf Cowbird.....	.35
Linpin, extra fine, 2nd class.....	1.00
Noddy Tern, 1 with data.....	.75
Sooty Tern.....	.40
American Scoter.....	2.50
Sennet Thrasher (33).....	.40
White winged Dove.....	.40
" " 25, with data.....	1.00
Carolina Wren.....	.20
Summer Tanager.....	.30
Acadian Flycatcher.....	.30
Trails.....	.30
Arkansas Goldfinch.....	.25
Chestnut-collared Longspur.....	1.00
Prairie Warbler.....	.75
Tufted Titmouse.....	.40

If you desire to obtain anything on the above list in exchange, send on your eggs at once. If you have no eggs, but have other desirable specimens in quantity, write what you have, with price; or will exchange for collections of fine Postage Stamps or second-hand Books on Natural History, or choice Indian Relics.

Only First-class specimens accepted at any price, all others returned at sender's expense.

We will receive hundreds of packages in answer to this exchange and if you do not write your name plainly on the outside of the packages you send, your exchange will be delayed and packages possibly lost.

This offer will hold good until Aug. 25th only. Send on your specimens at once in large or small quantities, it makes no difference to us whether you send \$1.00 or \$100.00 worth, but if less than \$1.00 worth, 10 cents extra must be enclosed for return postage and packing.

Large quantities, shipped by express or freight, must be prepaid. Address,

**FRANK H. LATTIN,**  
ALBION, N. Y.

## BARGAINS IN MINERALS.

Our specimens although cheap in price, are not in quality. Other dealers charge 5c for our 3c specimens and others in proportion.

Actinolite.....	\$ 03 to \$ 25	Emery.....	03 " 25	Nemalite.....	03 " 25
Alabaster.....	03 " 25	Epidote.....	03 " 25	Nickel Ore.....	05 " 50
Agate.....	03 " 5 00	Epidialyte.....	01 " 25	Novaculite.....	03 " 15
Agatized Wood.....	03 " 1 50	Feldspar.....	03 " 50	Obsidian.....	03 " 25
Albite.....	03 " 25	Fibrolite.....	03 " 25	Ochre.....	03 " 15
Allanite.....	03 " 25	Flint.....	03 " 25	Onyx.....	05 " 1 00
Amethyst.....	03 " 5 01	Flint Balls.....	05 " 15	Opal Wood.....	03 " 2 00
Amphibole.....	03 " 25	Franklinite.....	03 " 25	Orthoclase.....	03 " 25
Andalusite.....	10 " 25	Flexible sandstone.....	05 " 1 00	Oligoclase.....	05 " 25
Anhydrite.....	03 " 15	Fluorspar.....	03 " 3 00	Oriental Alabaster.....	10 " 75
Anorthophyllite.....	03 " 25	Forest Rock.....	03 " 50	Pearl Spar.....	03 " 25
Anthracite.....	03 " 10	Galenite.....	03 " 25	Pectolite.....	03 " 25
Apulite.....	03 " 15	Garnetiferous Albite.....	05 " 25	Peacock Coal.....	13 " 15
Appayilite.....	03 " 25	do. Granite.....	01 " 25	Petrified Wood.....	03 " 5 00
Argenter's Galena.....	03 " 50	do. Mica Schist.....	05 " 25	Porphyry.....	03 " 25
Aragonite.....	03 " 50	Garnet.....	03 " 25	Pumice.....	03 " 15
Arsenopyrite.....	03 " 35	Genthiite.....	05 " 50	Phlogopite.....	03 " 15
Asbestos.....	03 " 25	Geodes.....	05 " 5 00	Pierolite.....	03 " 25
Asphatium.....	03 " 1 00	Gneiss.....	03 " 25	Prelimite.....	03 " 25
Atacamite.....	03 " 25	Gold Ore.....	10 " 5 00	Pyrite.....	03 " 50
Azurite.....	03 " 25	Graphite Gr. bite.....	03 " 25	Pyroxene.....	03 " 15
Barite.....	03 " 25	Graphite.....	03 " 15	Pyrrhotite.....	03 " 25
Bituminous Coal.....	03 " 10	Granite.....	03 " 25	Pudding Stone.....	03 " 45
Bog Iron.....	03 " 10	Gypsum.....	03 " 25	seudomorphs.....	03 " 25
Beryl.....	03 " 25	Halite.....	01 " 15	Pyrophyllite.....	03 " 45
Biotite.....	03 " 15	Heavy Spar.....	03 " 25	quartz, Milky.....	03 " 50
Blood Stone.....	05 " 1 00	Hematite.....	03 " 20	quartz, Crystals.....	03 " 50
Borax.....	03 " 15	Hematite, Micaceous.....	01 " 25	quartz, Drusy.....	03 " 25
Bulrushone.....	03 " 25	Hematite Crystals.....	05 " 15	quartz, Glassy.....	03 " 25
Brookite.....	03 " 25	Hendlandite.....	01 " 25	quartz, Quartz.....	03 " 2 00
Calcinorm.....	05 " 25	Hornblende.....	03 " 25	quartz, Ferruginous.....	03 " 15
Calamine.....	03 " 50	Hornstone.....	03 " 25	quartz, Rose.....	03 " 25
Calcite.....	05 " 50	Hydroxymagnesite.....	03 " 25	quartz, Smoky.....	03 " 25
Calcareous Tufa.....	03 " 50	Ice-land Spar.....	03 " 1	Quartzite.....	03 " 25
Cannel coal.....	03 " 15	Idocra.....	03 " 50	Uensselaerite.....	03 " 25
Cancrinite.....	03 " 50	Indurated Clay.....	03 " 1	Rock Crystal.....	03 " 50
Calc Spar.....	03 " 25	Iron Pyrites.....	04 " 50	ock Salt.....	03 " 25
Carnelian.....	05 " 5 00	Iron Meteoric.....	03 " 1 00	Rutile.....	03 " 25
Cassinite.....	03 " 15	Iracolumite.....	03 " 1 00	Sath Spar.....	03 " 1 00
Cassiterite.....	03 " 10	Jasper.....	03 " 25	Scapolite.....	03 " 25
Chalite.....	03 " 50	Jel.....	03 " 25	Selenite.....	03 " 50
Celestite.....	03 " 25	Kaolin.....	03 " 10	Serpentine.....	03 " 25
Chalcedony.....	01 " 50	Kyanite.....	03 " 25	Sandstone.....	03 " 50
Chert.....	03 " 25	Labradorite.....	03 " 3 00	Sillimanite.....	03 " 25
Chlastoite.....	10 " 25	Lapis Lazuli.....	10 " 3 01	Siderite.....	03 " 25
Chrysocholla.....	03 " 25	Laumonite.....	05 " 25	Silicified Wood.....	03 " 25
Chondrodrite.....	03 " 25	Lava.....	03 " 25	Sulphurite.....	10 " 25
Clevelandite.....	03 " 50	Leelite.....	03 " 25	Soapstone.....	03 " 25
Chalcopyrite.....	03 " 25	Leopoldite.....	03 " 15	Silver Ore.....	03 " 25
Chalk.....	04 " 15	Lignite.....	05 " 25	Spinel.....	05 " 25
Chromite.....	03 " 15	Limonite.....	03 " 50	Specular Iron.....	03 " 25
Cinnabar.....	03 " 15	do. Pseudomorph.....	03 " 15	Sphaerite.....	03 " 20
Clay.....	03 " 25	Lingula sandstone.....	03 " 12 00	Staurolite.....	05 " 25
Clay-stones.....	03 " 25	Lithon Mica.....	12 " 10	Staurolite.....	03 " 25
Coquina.....	03 " 50	Lithographic Stone.....	05 " 25	Stribite.....	03 " 25
Conglomerate.....	03 " 25	Lodestone Native.....	01 " 50	Stibite.....	03 " 15
Coke, Native.....	03 " 15	Lumachelle.....	05 " 50	Stink Stone.....	03 " 25
Cookerite.....	03 " 50	Magnetite.....	03 " 25	Stream Tin.....	03 " 15
Copper Ore.....	03 " 25	Magnetite.....	03 " 50	Sulphur, Native.....	03 " 15
Copper Pyrites.....	03 " 25	Magnetite.....	03 " 50	Sodalite.....	05 " 50
Corundum.....	03 " 25	Malachite.....	05 " 2 00	Spodumene.....	03 " 25
Crinoidal Limestone.....	03 " 50	Marechalite.....	05 " 25	Talc.....	03 " 25
Crocidolite.....	05 " 2 00	Marmolite.....	03 " 25	Tourmaline (black).....	03 " 25
Cryolite.....	03 " 25	Mennacanthite.....	05 " 25	do. (colors).....	03 " 25
Cubaalite.....	03 " 20	Marble.....	03 " 25	Tremolite.....	03 " 25
Cyanite.....	03 " 25	Marcasite.....	03 " 25	Tripholite.....	05 " 25
Daltonite.....	03 " 25	Mica Schist.....	03 " 25	Titanite.....	03 " 25
Dandrite.....	03 " 50	Mexican Onyx.....	03 " 3 00	Topaz.....	05 " 25
Derbyshire Spar.....	05 " 50	Mica.....	01 " 50	Tuta.....	03 " 25
Deweyite.....	05 " 15	Moss Agate.....	03 " 10	Variscite.....	03 " 1 00
Diamond.....	50 " 1 00	Muscovite.....	03 " 50	Vesuvianite.....	03 " 25
Diallogite.....	05 " 50	Melanconite.....	05 " 25	Wavellite.....	03 " 50
Diabase.....	03 " 25	Millerite.....	10 " 50	Williamite.....	03 " 51
Dolomite.....	03 " 25	Molybdenite.....	05 " 25	Wollastonite.....	05 " 25
Dogtooth Spar.....	05 " 1 00	Magnetized Muscovite.....	05 " 15	Wollongongite.....	03 " 25
Dawsonite.....	03 " 15	Mica, Green.....	03 " 25	Wulfenite.....	03 " 25
Dufrenoyite.....	03 " 25	do. Curved.....	03 " 25	Wernerite.....	03 " 25
Elaolite.....	03 " 25	Natrolite.....	03 " 25	Zinc Blende.....	03 " 25
Electric Stone.....	03 " 1 00	Natron.....	05 " 10	Zincite.....	05 " 50
Enstatite.....	03 " 25			Zoisite.....	05 " 50

# THE OOLOGIST.

VOL. VII.

ALBION N. Y., AUG, 1890.

No. 8

## The Caprimulgidae In Arkansas.

The Goatsuckers, like some of the Herons, are provided with a toothed comb on the middle toe, by which they are enabled to rid themselves of a certain portion of their parasitic adherents or obnoxious matter, and smooth the feathers.

There are three species known to occur in this locality, of which, perhaps, the Night Hawk is the most widely distributed and best known of any of the family. It is rare here, however, and does not breed that I can discover. It has only been seen during the migrations, and not known to alight. Its only note, known to me, (best produced by speaking the word "beard" in a whisper), is uttered as it wends its zigzag way through the air overhead.

The Whip-poor-will is next in order of wide distribution and general abundance. His clear, musical voice, (whence the name), may be heard on any still night from the early part of April till July. Then, like most other birds, his merry song ceases as he becomes settled in life, and the family cares appear. He is silent, except now and then a few occasional notes to cheer his mate. In the earlier part of the season they keep the forests ringing with the sweetest melody, throughout the night, and, as one after another joins in, at dusk, from different hill sides and ravines, it is truly a concert well worth hearing. Distance and location lend variation to the sound, and as the voices chime in, down some deep ravine, it reminds one of an orchestra in some great hall, and is particularly fascinating to him that hears it for the first time.

A dozen or more may be in hearing

at once, and as one quits off, another takes it up, and so the word is passed down the hollow till it dies away in the distance, to be repeated o'er and o'er. At other times it is a perfect medley of song; or, a single bird may be so near as to completely deaden the other sounds, and may keep it up for hours with scarcely an intermission. At such times, especially when one is taking his morning nap, it is quite unpleasant to be suddenly awakened by one of these planting itself near the house, or even in the door yard, to wind up its morning song. It is useless to try to sleep, and unless you frighten it away, you may wear your patience out waiting.

When rendered so near, its voice is loud and lacks that charming brilliancy so fascinating.

Often, when whistling, they seem to get excited, or in a hurry, and repeat the words very rapidly for a time. In singing, the head is thrown far back and the throat much dilated. They perch either on the ground, a rock, log or horizontal limb, and as a rule, sit lengthwise with the object on which they light. Their chief resort is the rocky ravines of the mountains. They are seldom seen in daylight and then only as they dart away in obscurity. The eggs are two in number, and too well described in Davie's work to justify an attempt here.

Occasionally, one can be called up by mimicry, and when heard so near there is a peculiar sound made before the first syllable, which resembles a noise made by the Ground Squirrel, as if it were a smack of the lips when the mouth is opened to utter the notes. This sound is synonymous to the first note, (chuck), of the Chuck-Wills-Widow, but is much weaker.

The Whip-poor-will arrived on the last day of March, and since that time I

have enjoyed many an evening stroll, out listening to his revelry.

The Chuck-Wills-Widow: This is not so well known as the former species, and is counted as rare everywhere, though I must say it is quite common in this locality. It is also named from the fanciful construction of its notes, and during the early evening keeps up an incessant flow of turbulent noise, which lacks the attractiveness found in the Whip-poor-will's song. It is sometimes called *Chip-butler-white-ook*. The last syllable is emphasized, the first being more faint, and, at a distance, is sometimes not heard. Like the Whip-poor-will, it often gets in a hurry and repeats the words so fast as to make them indistinguishable.

I beg leave to differ with the notes given in Davie's description of this species, which read as follows, "deep ravines, shady swamps and extensive pine forests are the retreats during the day, when the birds roost in hollow trees." Their favorite retreat, here, is open, sterile rocky ground bordering the hillsides, where there are no hollow trees to roost in. He further says, "when in search of food, the same places are resorted to at night, and their singular notes are only uttered for a brief period in early evening, when on the wing." My experience is quite different. They resort to the same places at night, but in the mating season, they may be heard from dusk till bedtime, and I have yet to find the first one that performed such a part while on the wing. Of a hundred or more which I have traced up in the moonlight, every one was perched on the ground, a rock or log, or occasionally on a low limb or snag, while singing. They change their position frequently, however, while catching insects, and perhaps this gives rise to the idea that they are flying about. Yet, if disturbed, they do make a peculiar guttural sound like that of a bullfrog, or a rattling *ba-a-a-a*, when on

the wing. The female is generally along and utters the same noise but not nearly so coarse.

They are very hard to approach, owing to the fact that the female is close at hand, keeping guard while he sings, and at the least rustle in the leaves or brush, she takes flight, followed by her companion flapping his wings together occasionally, but irregularly and not twice together. Their flight is short; even if shot at they will only fly fifty yards or so and resume their music, if such it can be called, but I dare say that if a stranger should pass through these parts at night, and a bird would suddenly begin singing within a few rods of him, he would think of anything before "sweet music." It is absolutely the most lonely and bewildering sound I ever heard, and I shall not soon forget my first experience with them. It was in the spring of '88 that I had my first experience in a new unopened country, ravaged by forest fires and as I imagined, from numerous letters received, abounded in bears, panthers, wolves, wildcats, deer and other wild animals, liable to meet one in the road at all hours of the day. Guess at my feelings, as I started out alone and on foot, at nightfall, to travel three miles and a half over one of the roughest and wildest mountain trails in Arkansas for the first time. I was not much of a coward, and was determined to "surprise" the folks that night, if I didn't get lost, but I must say I quailed when one of these birds struck up a lively tune almost in front of me. I made the trip safely, though I carried my gun at full cock the rest of the way, and was ready to shoot every black stump or other unsightly object that came to view.

Twenty-five of these birds may be heard at one time, and a specimen shot measures fourteen inches, and twice as large in bulk as the Whip-poor-will.

They first arrived on April 29th.

"ARKANSAW HOOSIER,"

Clinton, Ark.



### The White-bellied Nuthatch.

TAKEN FROM FLORENCE A. MERRIAM'S  
"BIRDS THROUGH AN OPERA-GLASS."

Crossbills, Snow Buntings, Blue Jays, Pine Finches, Pine Grosbeaks, Goldfinches, and sometimes other birds visit us here at irregular intervals during the winter, but there are four little friends that never desert us, no matter how long the winter lasts. They form a novel quartette, for the Chickadee whistles the air, the Nuthatch sings his meagre alto through his nose, and the two Woodpeckers—the Hairy and 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 are 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 serenading by themselves, and who knows what gossip they indulge in about the grave magicians' day dreams, or how gayly 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. 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 comic figure he makes there!

Trying to get a view of 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 this habit of walking down the trees, since instead of walking straight down backwards, 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," for he will run along the under side 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 tree<sup>2</sup> in spring he "happens round" at the sugar bush to see what sort of maple syrup<sup>3</sup> they are to have. He tests it well, taking a sip at "the calf" where it oozes out from 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 put on a pair of thick boots and go to visit the beeches. There in their tops are the Nuthatches, for they have deserted the tree trunks for a frolic. They are beech-nutting! 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 chumsy work they make of it, trying to cling to the beech-nut 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. But they persist, and after tumbling off from several burrs, finally snatch out a nut and fly off with it as calmly 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 rough-barked tree, when they stick the nut<sup>4</sup> in between the ridges of the bark, hammering 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 far 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 soft *yang, yang, yang*, is full of woody suggestions. In the last of June I noted the sweet *yah-ha* of the Nuthatch, the same *yang, yang, yang*, and his nearest approach to a song, the rapid *yah-ha, ha-ha-ha-ha*. 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 while that expresses the mellowness of the note on some days better than *yank*, they are both descriptive. But though certain notes may predominate in given months, on a cold January morning I have heard from a flock of Nuthatches every note that I had ever heard before at any time of the year.

Like the other members of the quartette, the Nuthatch nests in holes in trees or stumps, while its lightly spotted eggs, six or eight in number, are laid on a 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 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 that rested like foam on the slender twigs. The snow that had drifted

against 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, snow-outlined, made exquisite filigree against the pale blue sky. But suddenly, as the woods 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 forest. If the snow covered the upper side of a branch, they ran along upside-down on the under side; if the south side of a tree trunk was white, they walked, 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.

#### Two Instances of Strange Co-habitation— Wood Thrush and White-eyed Vireo.

While on a collecting trip a short time ago, a little incident came under my notice which I thought might possibly be of enough interest to the readers of THE OOLOGIST to publish.

On June 21st, I found a nest of the Wood Thrush, noticing, in the nest, a very large egg for this species. (Size 1.10 x .81.) I took it, leaving two in the nest. I thought no more about it until three days after when, as I was going by the place, happening to remember the nest, I went to look at it. What was my surprise on nearing the bush, to see a strange small head peep-

ing over the edge of the nest. I went up carefully, and was able to get within two feet of the nest before the bird flew off, lighting on a twig about a foot above it.

Taking a good look, I was able to identify the bird as a White-eyed Vireo. The two Thrush's eggs were in the nest and one egg of the Vireo.

Two days later when I went to the nest, the Thrush's had hatched (incubation was far advanced when I took my egg) and the Vireo's egg was gone. I sat down a little ways from the nest and in a few minutes saw the old Vireos feed the young Thrushes.

I would like to know if anyone else ever noted a like instance?

E. D. ROYCE,  
Tolland Co., Conn.

#### DOWNY WOODPECKER AND PEWEE.

About the middle of May of the present year, I heard the cheery notes of a Downy Woodpecker for several successive days, in a small tract of timber near my home, and knowing these notes to be those of love I concluded it had, or at least would have, a nest in the vicinity.

So I kept a vigilant watch, and on the 27th of the month, as I rapped upon a dead wild plum tree stub, I was rewarded by seeing Mrs. Downy fly out, and, thinking it rather late in the season for eggs of this species, I immediately "made way" into its nest, by sawing off the stub just above the opening, when to my dismay the nest was found to be empty.

Sawing a thin piece from the stub just sawed off, I placed it over the hole, so that no person would notice it except by close examination, and to my joy, Mrs. Woodpecker did not either, or if she did it "cut no figure" with her, for on May 30th it had two eggs. The next day another one was added, but on June 3rd it was found to be empty,

robbed by some animal or boy, and my set of eggs was gone.

At this time a Pewee had built her nest under the projecting roots of an oak over a gravel bed, only about ten yards from the tree where the Woodpecker had built. On June 3rd, this Pewee's nest had no eggs in it, but on June 6th it had two eggs in it, which exactly resembled those three that were destroyed or taken from the Woodpecker's nest. Those two eggs resemble in every way, all the eggs of the Downy Woodpecker in my collection and all I have ever seen alike in size, shape and usual gloss of eggs of the family *Picidae*.

My opinion of them is: When robbed of her three eggs and her nest destroyed, she, having no receptacle for the other two eggs, deposited them in the nearest available place—that Pewee's nest.

The Pewee laid no eggs, but sat on those two for about a week and then deserted them. On June 25th I took them, and on blowing, the contents of each were "dried up," in fact there was scarcely anything in one of them.

Soon after being robbed the Woodpecker began the excavation of another hole in the same stub, about eight inches lower down than the other one, and on June 14th I took a fine set of four eggs from it. I have neither heard nor seen the Woodpecker since.

As I have before said, those two eggs exactly resembled this set of four eggs, OOLOGISTS, here is a nut for you to crack. I would be pleased to have opinions expressed as to whether those two were eggs of Downy Woodpecker or not.

"WISCONICUS,"  
Dodge Co., Wis.

#### Variation in the Eggs of *Habia Ludoviciana*.

Although no material variation presents itself in the eggs of the Rose-

breasted Grosbeak in the same clutch, nor still any enormous variation anyway, yet, when a series of sets are brought together, there will be noticed different phases of markings which constitute quite a variation and this variation will be more conspicuous, I dare say, as the series grows larger.

I fail to find any variation whatever in the shade of the ground color, it being, in all specimens compared, the same greenish-blue tint. As to size there is an appreciable variation, but I will not stop to speak of this variation.

To suit my own fancy, I have divided the various markings of the eggs of *Iudoriciana* into three classes or phases which I will name for convenience: the reddish, the dark brown and the greenish-drab.

I will now attempt to describe four sets of eggs from my collection, as representing these three phases, remarking first that under-markings of lilac occur in all specimens which I have seen.

Sets 1 and 2, of the four above named, represent the reddish phase of markings, set 1 being very heavily marked, while set two is much more lightly and sparingly spotted. These reddish markings are almost precisely similar in color to the color found on eggs of the Field Sparrow, where the spots mingle thickly about the great end. In set 1 the markings are nearly all blotches or large spots, there being scarcely any minute markings. These blotches and large spots cover nearly the entire surface of the egg and in egg No. 2, of this set, almost hides the ground color. Egg No. 1 is an exception to this statement, the markings being very well confined to the large end, the smaller end being almost wholly unmarked. The general cast of this set is a dull red.

The markings of set No. 2 are of the same color as those of the previous set, but are very different from them both in size and distribution. The spots and

blotches are both small and well confined to the great end of the egg, although, of course, as is always the case, there are scattering spots and markings throughout the entire surface of the egg. In this set, the first trace of a confluent ring of spots about the larger end is noticed, it being very distinct in egg No. 1 and quite indistinct, though plainly discernable in the other three eggs of the set (all of the sets here figured comprise four eggs each). Although the tint of the ground color and of all the markings are precisely the same in both the sets 1 and 2, yet their general appearance is very different, occasioned by the heavy and numerous markings of set No. 1.

The dark brown phase of markings is represented by set No. 3. The markings of this set, as concerns size and distribution, are similar to those of set No. 2, differing from them only in color. The color of the markings is a dark brown, almost reaching black in one or two spots and approaching greenish-brown in others. In this set, the confluent ring is plainly discernable in three of the eggs and wholly indiscernable in the fourth.

Egg No. 2 is very light, in that the markings are few and sparse and nearly all confined to the confluent ring, which, consequently, is very conspicuous. The smaller end of the egg is comparatively free from spots.

Set No. 4 represents the greenish-drab markings and is the most peculiar set of this species I have ever noticed, not, perhaps, because this phase of markings is more uncommon, but because the markings are so exceedingly light and faint. In color they are almost precisely similar to the markings of the eggs of the Prairie Horned Lark.

Eggs Nos. 1 and 2 of this set are the most thickly marked and even these present a lighter appearance than egg No. 2 of set 3, mentioned above. Eggs 3 and 4 of this set present markings

which are scarcely darker than the ground color of the egg. Especially is this so of egg No. 4, upon which, when held at a distance of four feet from the eye, no markings can at all be discerned, it appearing as a plain, unmarked green egg. On all the eggs of this set the spots are very minute, as much so as those of the eggs of the Brown Thrasher. The confluent ring is noticed in all the eggs of this set.

There also occurs in the eggs of *Habia ludoviciana* a slight variation in form, some being more pointed or more rounded at the small end than others.

The nests of the Rose-breast have always appeared to me to be very uniform both in location and construction.

N. F. P.

#### ◆◆◆◆◆

#### The King Rail in Minnesota, and Other Notes.

Since writing my short article on the "Family Rallidae in Minnesota" in a former number of the COLOGIST, I have added another species to the list.

On June 14th, of this year I got a day off and went out to see how the birds were getting along. Arriving at the meadow I started in and had scarcely taken ten steps when a Blue-winged Teal flushed from under my feet. The nest was nicely lined with down and contained nine eggs. I did not take these as the law is very strict prohibiting the taking of Duck eggs.

Further on I found several sets of Sora and Virginia Rails but left them as I had no use for any. Noticing a large bunch of swamp hay, and as it looked somewhat suspicious, I stooped down to separate it, just as a King Rail flew out. I recognized it immediately and was in such a hurry to get it that I shot before it was more than eight or ten yards off. When I picked it up it was so badly mangled, that I was unable to preserve more than the breast, head and neck. Going back to the nest, I found a fine set of ten.

They greatly resembled the eggs of the Virginia, but were about twice as large. The nest was composed of grasses and hay piled up to a height of ten inches. It was slightly hollowed, and as a whole, looked about like the nests of the Virginia. This nest and eggs are, I believe, the first recorded set taken in Minnesota. The birds are quite rare; but five being taken in the last twenty years.

Continuing on around the lake, we found two sets of Mallards' and one of Teal's, which we did not take. Every bit of floating weed contained a set of Black Tern; eggs were all around us but we were looking for a set of the Wilson's Phalarope, numbers of which were flying over our heads. I collected several males and females, the plumage of the males showing that they had begun to incubate. Suddenly, flushing one in the long grass, I ran up and found the nest. It was situated on a small hummock, about four inches above the level of the water. The top of this hummock had been slightly hollowed and lined with grasses. The eggs, four in number, were a great deal smaller than I had expected they would be. They somewhat resembled those of the Spotted Sand Piper, but were considerably smaller. Having had no time to measure them I am unable to give the exact size.

As it was getting time for me to return I looked around hurriedly and found another set of four. The location of these were the same as the first set. There were at least fifteen pairs of birds breeding here and I am confident that if I had had enough time I could have gotten a nice series.

On the way out we found a set of six Bobolink's, five Grass Finch's and five Chipping Sparrow's all within a space of six feet. Not taking any of them we wondered at the harmonious relations sustained by them, and providing that they all hatch out in due time; they will

have plenty of company besides their own brothers and sisters.

WILL DE LA BARRE,  
Minneapolis, Minn.

Notes from the Audubon Ornithological Club.

A friend of mine in Caldwell, Wis., in a letter of June nineteenth tells me of an albino Robin that he has recently captured. It is pure white with no markings.

A few days ago I killed an English Sparrow in a manner that could not be called a violation of the city law, which protects these plagues. I was riding my bicycle down Jackson Boulevard, when an English Sparrow that tried to cross ahead of me was struck by a spoke and stunned. I took it home and put it in a cage. It was afterwards killed by a cat.

On the fourth of July I saw a female English Sparrow with several of the secondaries of the left wing pure white.

On examining an old note-book I find a nest of young Robins recorded on March 12, 1888. Is not that rather early for this locality. There was snow on the ground at the time. A pair of evening Grosbeaks were seen at Caldwell, Wis., as late as April 1st, this year.

When the members return from their vacations I think you can expect some good notes from the Club.

A. R. HAGER,  
Pres. A. O. C.  
Chicago, Ills.

An Imprisoned Wren.

On the 8th of May, last, a pair of House Wrens began to build a nest in a bird-box placed in some vines near my home.

After working at it for quite a while the nest was completed. After this, at different times, I investigated the nest by removing the back of the box, when

the old birds were away, but never found any eggs.

June 21st, I opened the box and found that the old bird was there—dead, with the appearance of having been so at least a week.

On examining the box I found that the entrance was filled full of twigs, packed so tight as to render it impossible for the bird to get out, (this being the only opening except two small air holes.) It occurs to me that, as the nest had been so long without eggs, that the male bird had imprisoned its mate so as to compel her to lay, much after the manner of the Horubill, a bird, native of Asia and Africa, which fastens the female in a hollow tree leaving only a small aperture through which to receive air and food, there to remain until incubation is complete.

The nest contained two eggs, one of which was of the average size, while the other was much shorter being almost globular.

M. L. FISHER,  
Lycoming Co., Pa.

A Robin Caught by a Barbed-wire Fence.

While passing through a woods one day in the summer of 1888, I came across a robin, firmly fastened to the barbs of a wire fence.

A closer examination showed that one barb had passed through one wing, and another had entered the breast, holding the bird so firmly that it could not possibly have released itself.

As it had bled freely I do not think it could have lived very long after its impalement. It had evidently been dead several days when I found it, and had probably been flying rapidly when the barbs caught it; and there was also evidence that it had struggled violently to free itself, but in vain.

WILFRED A. BROTHERTON,  
Oakland Co., Mich.

# THE OOLOGIST

A MONTHLY MAGAZINE DEVOTED TO  
ORNITHOLOGY AND OOLOGY.

FRANK H. LATTIN, ALBION, N. Y.

EDITOR AND PUBLISHER.

NEIL F. POSSON, MEDINA, N. Y.

ASSOCIATE EDITOR.

Correspondence and items of interest to the student of Brds. their Nests and Eggs, solicited from all.

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## Pencilings.

In the April OOLOGIST appeared an article on the "Family Rallidae in Minnesota" by Will de la Barre.

As an addition to that family, Mr. La Barre relates in this number, the occurrence of the King Rail near Minneapolis. The taking of a specimen of this bird in Minnesota was also recorded by Mr. Cook of Minneapolis in the June OOLOGIST. These are rare "takes."

We often come across amusing mistakes in a printer's proof.

When the proof of the July number came before us, we were somewhat amused to find the Red-winged Blackbird and Yellow-shafted Flicker posing in print respectively as the Red-mug Blackbird and Yellow-shafted Tiekler.

Let all persons sending queries, write their name on each, separate slip containing a query. Failure to do this has been the cause of so many replies being addressed to "Name mislaid."

To our contributors: We are now receiving at your hands an excellent class of manuscript. We speak of this because it strikes us favorably and because we desire a continuance of the same.

It is the constant aim of the OOLOGIST to gradually improve its subject-matter and to raise it to a higher scientific standard. To this end, we urge our contributors (as indeed you have been doing in the past) to write about the rarer species and to take for subjects those things which are not generally known. Success to you, one and all.

We have just received a little book entitled "Recollections of General Grant" by George W. Childs. We haven't had time to look at it yet, but it looks as though there was "something in it." We will mention it next number.

Just as we are going to press, a "small boy" comes into the office of "Ye Associate Editor" and displays an egg which he found and gives a description of the bird and nest, and we are convinced that it is the Chewink.

This is valuable in that this is a rather northerly breeding-place for this bird and this is the first instance of its breeding here.

It is one of the rarest summer residents in this section.

The "small boys" of Medina seem to have better finds generally than their more experienced and scientific (?) predecessors.

We have received from E. S. Cheney, artist, Pitrodie, S. D., a number of photographs of different ornithological subjects, such as Short-eared Owl, nest and eggs of Marsh Hawk, etc., etc., which are wonderfully true to nature and speak highly for the artist. We haven't time to mention them further at present, but we promise our readers an interesting article in next number concerning this latest achievement in ornithology and some entertaining things concerning what the camera can

do for the ornithologist. Mr. Cheney will please accept our hearty thanks for his excellent productions.

#### Here and There.

James Hill, of Edinburgh, Ills., writes as follows concerning the nesting of the Prairie Horned Lark in his locality:

I have had considerable opportunity to study the nesting of this species by plowing in fields where they were abundant. I have noticed in all nineteen sets of this species during 1890, my first find was on April 8th in a pasture, the nest contained two young and one stale egg. The nest must have been made about March 20th. In early spring they breed here in the pastures. But in May and June, when the corn is from four inches to one foot in height, their nest may be found by the side of a growing hill of corn. I found a set of five eggs on June 19th of uniform size and very dark markings.

I think sets of this number are very rare. I found a set on June 15th containing two eggs. One was "white" except on the great end it had a few very dim blotches scarcely discernable. The other egg has the spots concentrated around the large end. My last nest consisted of three eggs found on June 21, 1890.

Fred A. Schneider, College Park, Cal., reports a nest of the Western Red-tailed Hawk taken by him April 26th, containing four eggs, two of which were nearly white. Is not this a rather large set?

On June 23rd, G. H. Bockoven, of Palmyra, N. Y. relates the taking of an egg of the Chipping Sparrow, which was distinctly spotted on the smaller end instead of the large end; a rather peculiar egg.

In regard to the question of birds watering their young, which was discussed somewhat in the May OOLOGIST, Kit Atkinson of Dime Box, Texas, gives us the benefit of a little observation. He writes:

"In 1888, I took a set of young Orchard Orioles and put them in a cage so the old birds could feed them. I brought them near the house and put

a water-glass in the cage so they could have water. The old bird would come and put her bill in the glass of water and then put it in the mouths of the young birds. I think she was watering the young; if not, she must have been playing that she was."

W. E. Snyder, Beaver Dam, Wis., writes:

"On the 11th of July, I took a set of four fresh Robin eggs of usual size from a burr oak. The eggs are the same in color as those of a Catbird, and but for size, shape and seeing the Robin on the nest, I would have pronounced them eggs of that bird. Is not that an uncommon color for Robin eggs?"

John W. Arnold, Allegan, Mich. reports a Chimney Swift which has built its nest among the Barn Swallow's nests in his barn for three successive years.

W. E. Drennan, New Sharon, Ia. relates the following:

"On June 25th, while on my way to a neighbor's house, I saw an old stump over in an orchard. Seeing a Bluebird around, I thought probably there might be a nest in it. On going over I saw a Bluebird fly out of a hole in the stump, and, looking in, I beheld three Pewee eggs almost ready to hatch. The Bluebirds had occupied the nest for some time, for they were seen there some time before. The Pewees were flying around close to the nest, but seemed afraid to battle with the Bluebirds for possession.

This is the first time anything like that ever came under my notice; and also the first time I ever knew of a Pewee nesting in a stump."

F. C. Hare, Whitby, Ont., Can. writes:

"I think you have given to Mr. G. E. B., Marion, Ala., the wrong idea of a 'Butcher-bird.' In Canada, the name Butcher-bird is the common name for the Northern Shrike, A. O. U. No. 621."

[The name "Butcher-bird" is applied to all the Shrikes; to the Californian of California, to the Loggerhead of the Southern States, to the White-rumped of the Western and Northern States and to the Northern of the high North.] —EDS.



## Our Question Box.

Queries to be answered in these columns should be written on a postal or slip of paper—never mix them in your letter when writing about other matters.

C. E. G., Pasadena, Cal.—Your description is not sufficient, but think your bird is doubtless Gairdner's Woodpecker.

L. A. S., Elgin, Ills.—White eggs of the Bluebird are not uncommon. Reports are current of their being taken in almost all parts.

P. S., Simcoe, Ont.—1. The best method of killing insects is by means of a cyanide bottle.

2. The "Auk" is published by L. S. Foster, 35 Pine St., New York City.

3. A turtle can be removed from its shell by placing it in boiling water for a few moments, when the softer parts can be easily removed.

H. M., Garden City, Kans.—As to the value of eggs of the Black Rail, we would say that no definite value can be placed upon them; but they are rare and desirable and would doubtless bring anywhere from twenty-five cents to five dollars per egg. As a list-price, we might suggest \$2.00.

W. B., Los Angeles, Cal. and A. W. M.—The eggs of the California Clapper Rail are worth, doubtless, somewhere from twenty-five to fifty cents each. Some California collector can undoubtedly give a better opinion.

A. V. T., Decorah, Ia.—Your little bird of a greenish-yellow color, which arrives in May and stays in bushes and low trees, is probably the Yellow Warbler.

W. M. F., Sedalia, Mo.—1. Your eggs of the Yellow-billed Cuckoo which measured respectively 1.40 x 1.09, 1.40 x 1.08, 1.38 x 1.11 and 1.44 x 1.11 are unusually large eggs for that species.

2. It is impossible to tell to which species of Cuckoo your second set belongs, from your description.

A. L. T., Newark, N. Y.—The American Coot is frequently called "Mud Hen." There are other water birds that are also called by this name.

W. W. G., Rutland, Vt.—Three-story nests of the Yellow Warbler are not uncommon.

R. M. B., Clyde, N. Y.—The Red-shouldered Hawk is known as the "Winter Falcon." The eggs of this bird do not measure as large as the measurements you give.

Name mislaid.—1 The eggs of the Chipping Sparrow are nearly always of a darker blue ground than those of the Bluebird.

2. The Ruffed Grouse not infrequently raises two broods in a season.

3. The Whistling Swan breeds only in the high North.

B. S. B., Phelps, N. Y.—1. Observations that approach accuracy seem to infer that Hummingbirds feed their young by regurgitation.

2. The nest of the Grasshopper Sparrow is placed on or sunken in the ground and concealed by a thick tussock of grass. The eggs have a clear white ground-color, with a moderate polish, spotted more or less thickly with pale reddish-brown, chiefly and sometimes wholly at the large end. They measure about .78 x .56 in.

3. The nest of the Savannah Sparrow is a slight arrangement of grasses in concentric rings, the rim being flush with the surface of the ground, in which the nest is sunken. It is generally well concealed among the weeds and tall grass. The eggs are four or five, greenish or grayish-white in ground-color, spotted, speckled, and blotched with light-brown and lilac. Markings often very numerous. Measurement, about .76 x .54.

W. T. B., Philadelphia, Pa.—Your Yellowbird with black head and wings laying a white egg, is probably the American Goldfinch.

I. C., Paducah, Ky.—Description insufficient.

Name mislaid.—Your description of nest and eggs of bird like Phoebe is somewhat unshapely. We cannot conceive of a bird only a little larger than a Wren laying an egg  $1\frac{3}{4}$  by  $1\frac{1}{4}$  inches in size. Your description is like the eggs of either the Kingbird or Wood Pewee only for size.

G. R. P., Washington, Ga.—Cannot your red, white and black bird called "Shirt-tail," be the Red-headed Woodpecker?

F. B., Chadron, Neb.—Your female bird with yellow under parts and brown back, hanging its nest from the small twigs of trees in groves, the eggs being faint bluish, dotted and lined with dark-brown or black is doubtless the Orchard Oriole.

E. L. Y., Thornton's Ferry, N. H.—The description of your bird, nests and eggs corresponds well, we think, with the Meadowlark, nest and eggs.

Y. K. K., Scottsburgh, Ind.—1. The egg of the Belted Kingfisher is pure white, nearly spherical, 1.36 x 1.05. The egg of the Cedar Waxwing is light slate-color, with blotches and spots of dark-brown and purple, almost black. Measurement .84 x .61. The egg of the Bobolink is dull or grayish-white, tinged with light drab, olive or reddish-brown, intermingled with lavender, .83 x .61.

2. Although there may be no real depreciation in value of an egg because it has unnatural stains, yet an egg free from stains always seems to be worth more, in that it is a better specimen.

F. C. H., Whitby, Ont.—The Brown Creeper, A. O. U. No. 726 is the *Certhia americana* you refer to.

B. R., Toulon, Ills.—1. Cannot tell from the description given.

2. We can furnish John Burroughs' works at \$1.50 per volume.

G. M. W., Gibbon, Neb.—The queries of "Our Question-Box" are answered by the Editors.

T. W. G., Whitman, Mass.—Sets of eggs of a given species should be numbered consecutively beginning the season with the number you left off the previous season. No two sets in any collection should bear the same number.

In regard to the "black and red" bird called "Rink," queried about in

the last OOLOGIST, G. M. W., Gibbon, Neb., thinks it is the Chewink or Towhee. We think this conjecture is correct. The "red" might be accounted for as *chestnut*, perhaps.

### Book Review.

**Bird Ways.**—OLIVER THORNE MILLER.

In Riverside Library for Young People, 16mo. \$1.25. Boston: Houghton, Mifflin & Co., 1889.

This work, written in a popular style, is described by its title, for the many winning ways of the birds treated are depicted very pleasingly by the words of the author. He relates many interesting incidents and experiences with the birds and tells his readers many things which must be new to them. He tells so many little things, in regard to some of the birds, that the ordinary observer would never notice—so many of their cute and quaint doings.


The author makes the assurance, in the introduction, that the things recorded in his book are the results of his own personal observation.

Chapter I is entitled "The Bird of the Morning" and is a faithful portrayal of the goings and doings of our common American Robin. Speaking of a Robin's nest he preserved, the author says:

"This snug cottage of clay has been the scene of some of the sweetest experiences of all lives, great as well as small. For the happiness it has held, I will preserve it, and thus moralizing, I placed it on a bracket in memory of a delightful study of the Bird of the Morning."

Some of the other chapters are: "The Bird of Solitude" and "A Gentle Spirit," both referring to the Wood Thrush; "The Bird of Society," referring to the Redwing Blackbird; "Upon the Tree-Top," referring to the Baltimore Oriole, and "A Ruffian in Feathers," which, of course, means the House Sparrow. The five closing chapters are devoted to the various temperaments; impulses, ways and doings of the House Sparrow.

As a whole, there is much in this little work for the live ornithologist and worlds of entertainment for the popular mind.

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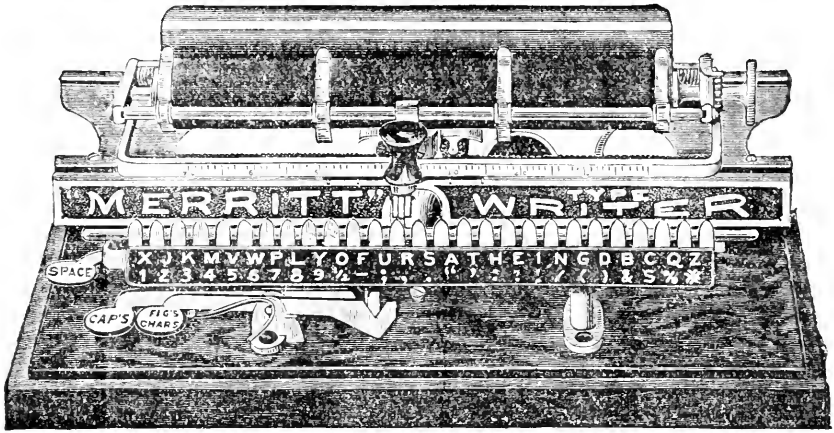
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# THE OOLOGIST.

VOL. VII.

ALBION N. Y., SEP, 1890.

No. 9

## The Use of the Camera in the Field.

We shall suggest in this article some application of photography to the study of ornithology, alluding particularly to the use of the camera in studying nests and nesting sites of birds; and briefly to the climatic and botanical influences upon the bird at the time of nesting.

We hope that ornithological photography will claim some part of your attention. The beauties of nature which are so manifested in the feathered tribes and their modes of nesting will surely create a desire to photograph them, while as regards the latter it should not be forgotten that in bird architecture there lies hidden in a great measure, "a key to the minds and thoughts of the birds."

If we could steal quietly upon a nest every day during construction and from the same point each day take a photograph, carefully noting the changes which have occurred, which are not shown in the picture, would not our series when complete bring to our knowledge many interesting facts? (however not forgetting to note the condition of the weather.)

I venture an answer; It would prove far more instructive than a series of eggs; prove whether nesting was carried on steadily or was influenced by cloudy, rainy or windy days or violent storms; last but not least, the exact number of days occupied in the construction.

It would show where new material was daily woven in or added; the mason work as it progressed; the lichen overlaying or downy lining as the case might be, until the structure was complete.

Whether or not, it is possible to complete such a series without causing the

birds to forsake the nest remains to be found out.

To those who feel disposed to attempt another difficult subject, we will say that we have yet to see a series of photographs illustrative of the development of the chick in the egg. Another, but less difficult subject could be suggested: A series of photographs illustrating the growth of young birds.

During our spring-time rambles in wood, meadow and marsh is there not many a nest beautifully constructed upon which we look with admiration and delight; many a nest neatly woven showing the artistic taste of Warbler and Oriole in the choice of site and selection of material; nests judiciously concealed which baffle our wits to discover; scores of nests of all sizes, some plain, others beautiful; which are common sights to us and which we keep to ourselves or forget as years come and go?

Would not photographs of nests of birds which are not common in your locality be exceedingly interesting to your oological friends in remote districts where such birds never venture, if not interesting to yourselves?

Who can describe the magnificence of the architecture of some birds. We are too ignorant of the grandeur which lies hidden in remote localities and will be unless we see it with our own eyes. Is it not possible for us to have these sights brought to us by the valuable assistance of photography?

Oh, readers! if we would collect fewer sets and pay more attention to the nests and their composition; more attention to the birds and their habits; and have more pictures showing nesting sites, form, etc., we would learn much more, and find our collections more valuable and interesting. We are too anxious for large series and a great

variety of sets, to trifle with pictures. The botany so important, is neglected, and the datas are too brief in some cases to be interesting or of much value.

There are but few nests in reach of man, which are out of reach of photography. Time will prove this assertion. Years will work wonders with our combined efforts.

We can spare neither time nor space to mention the numerous modes of securing pictures of the great variety of nests in all sorts of places, for each nest needs a little different treatment.

As "a starter," will mention a few. Some nests of Woodpeckers will yield beautiful results by removing a portion of the wood on one side so as to show the eggs. For such purposes you need a sort of tripod platform for the camera which can be fastened by means of nails driven into the tree. A view of the tree from a near stand-point is good if the nest is not too high to show plainly. In this case the nest must not be tampered with, and if one bird could be also taken in, it would add greatly to the value of the picture. For very large nests out of reach of camera or any mount, a full view of the tree is extremely interesting. I have no trouble in getting views of the nests of Hawks at a distance of from ten to twenty-five feet, for most of our Hawks nest in the lower branches of small trees. Among my little collection of pictures I find a photo. of a large tree containing eleven nests of the Great Blue Heron taken while on a photographic tour last June, which is very interesting.

Nests placed on, or suspended from small branches out of reach of the camera or a ready mountant, will, if artistically arranged yield beautiful results. Proceed as follows: After having removed the eggs, if any, sever the branches holding the nest, at least twelve inches from it, tie them together

at the butts to prevent their catching and tearing the nest. If tightly woven it may be thrown down; otherwise it must be carried. Suspend the nest by string or rope before a suitable back-ground. Not the painted affair; but nature's back-ground, imitating as much as possible its former surroundings. If done skillfully, who will know whether it was photographed from a baloon or from the ground.

Nests placed on, or in the forks of, large limbs may sometimes be photographed from suitable limbs; but generally will have to be moved to a more convenient place. Photos. of nests which have been removed from their resting places, are of but little value in the study of nesting sites; but their beauty compares with, if not excells those taken under less favorable conditions.

Always allow the light to fall freely on the nest and use as small a stop as the lens will use without showing central spot; that your picture may be sharp and well defined. Some writers recommend large stops which I find very unsatisfactory at close range (one to four feet.) Others say "do not attempt pictures on a cloudy day." I agree with them in a few respects: Distant and instantaneous views. I never wait for a fair day, to take a picture of a nest at close range and can show some fine pictures taken on stormy days, with a little breeze thrown in.

On such days I use a little larger stop and vary the exposure to suit the subject; no rule can be given; you must use your own judgment to suit the situation of your subject and the rapidity of your lens.

As a final remark I wish to mention a queer nesting site, which can undoubtedly be attributed to botanical or climatic influences.

During a sketching ramble the latter part of June, 1886, I discovered a nest of the Orchard Oriole containing four

fresh eggs; in a tangle of bindweed (*convolvulus sepium*) and nettle (*stachys palustris*) two and one-half feet from the ground. It was well protected from "Dakota breezes" on all sides, there being a long strip of willows growing at the water's edge on one side and partly surrounding it, while it was well protected by the river bank on the other.

If the weather had been carefully noted some time previous to nesting; the nest photographed, and compared with a series of pictures illustrative of the nests and nesting sites of this species, with notes concerning the botany of each nest; the surrounding botany, which was supposed to offer some special attractions; and notes concerning the weather which was supposed to have had some influence; would it not have been possible to have assigned some cause for this odd nesting site.

Perhaps a strong wind previously destroyed a nest of this pair, (many nests being thus destroyed every year) thus causing them to seek a different nesting place; or, there might have been some attraction to the spot. Who can solve the mystery?

E. S. CHENEY,  
Pitrodie, South Dakota.

*To be continued.*

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**Sawhet or Acadian Screech Owl.**  
(*Nyctala acadica*.)

I was much interested in the article which appeared in the June OOLOGIST written by Mr. Merritt. It caused me to feel it my duty to relate my experience.

On April 24, 1890, I was walking along a small wooded creek which flows through my father's farm. Seeing something fly into a last year's Flicker hole, I started to climb the tree to see what it was. To my surprise, two little Owls flew out which I saw at

a glance were not the common "Screech Owl." Presently one flew into a hollow tree near by. With all the caution I could avail I proceeded to ascend. I succeeded in getting my hand over the hole in which he had gone. The hollow was four feet deep and I saw I could not get him without the aid of an ax.

So plugging the hole with my hat, I started home. Getting an ax I returned to the scene of action. Chopping a hole was short work, but getting him out was still shorter.

As it was getting dark, I gave the other one no attention. The one I captured presented the following data: Sex, male; stretch of wings, 17½ in.; tail, 3½ in.; locality, New Sharon, Mahasha Co., Ia.; date, April 24, 1890.

On April 26th, I was again passing by the place where I captured the Owl. I began to wonder what became of the female. I started to climb the tree from which I had started them before and nearly reached the hole, when out she flew. I chased her around some time, trying to get her to go into a hole, but I could not persuade her to do so.

I saw this was hopeless and accordingly started to get a gun. But before I could get back my Owl had flown.

Climbing the old tree again to see if they had a nest, I found four white eggs which measure 1 7-16 x 1 3-10. The appearance of the shell much resembles that of the egg of the Mourning Dove.

On May 3rd, while I was out in a grove, about a quarter of a mile distant from where I collected the Owl eggs, I saw a hole some eight or ten feet up. On climbing up, I found another Owl identically the same as the one collected on April 24th. Her measurements, etc., are sex, female; length, 8 inches; stretch of wings, 16½ inches; tail, 3½ inches; locality, New Sharon Iowa; date, May 3rd, 1890.

I was anxious to know what kind of Owls they were. I laid the case before Mr. R. D. Goss of New Sharon, Iowa, and he kindly informed me that he pronounced them the Sawhet or Acadian Owl. I think probably the female captured in the grove as above stated was the mate of capture No. 1.

She likely thought it not safe to remain longer in the tree I so often frequented. This is the only capture of this kind I know of in this locality.

WILLIE A. BRYAN,  
New Sharon, Iowa.

#### Nesting of the Black Snowbird.

On the 24th of July, I had the good fortune to find a nest of the Black Snowbird, containing three eggs, in a public park in the city of Binghamton. Although the bird was not secured, the identification is positive.

The nest was found along a much travelled road through an upland part of the park, and was placed in a hollow under an over-hanging bank. So effectually did the bank conceal the nest, that only the merest fraction of the edge was visible, and part of the bank had to be torn away to get it.

The nest is a thick, saucer-shaped structure of white horse-hair with a few fine grasses, rootlets and pine needles externally.

Where the edge is exposed the materials are coarser and more abundant, consisting of weed-stalks and grasses.

In color, the eggs are bluish-white, thinly speckled all over with dots and blotches of red-brown, which are thickest at the larger end where they run into a wreath somewhat after the manner of the House Wren's eggs. Measurements of the three eggs average .76 x .55 of an inch. Among common bird's eggs, they much resemble certain sets of the Song Sparrow.

From the lateness of the season this is probably a second brood. Although

incubation had begun, the female showed little anxiety for the safety of her eggs. She flew up into a small tree, near by, and remained entirely silent while I examined the nest.

This bird is generally regarded as breeding only in the North or in elevated mountainous regions; but in this case the bird has not even altitude in its favor, the highest point in the county being scarcely 1700 feet above tide, while the place where this nest was found is much lower. That the bird is a rare breeder in this locality, may be inferred from the fact that this is the first Snowbird I have seen in the summer months during a residence of five years in the county.

WILLARD N. CLUTE,  
Broome Co., N. Y.

[This bird has also been found breeding in the vicinity of Lime Lake, N. Y., and in other places south of Buffalo.]—  
ASSOC. ED.

#### Marsh Hawk. (*Circus hudsonius*).

This beautiful, useful and well known bird inhabits the entire lands of North America, breeding as far north as Alaska and the fur countries and wintering from about 40° north, south to Cuba and Panama.

The Marsh Hawk arranges its nest in suitable localities everywhere, from the southern border of the United States to the northern limits of its range, though being most common through the prairie lands of the west.

They breed at different seasons in different localities. In Texas the eggs are to be found by the latter part of April, in the fur countries, not until the middle of June.

The nest is always placed on the ground, usually in a swamp or prairie well grown up with grass or bushes, with water at an easy distance. The nest is commonly placed at the base of

an overhanging bush, that making it very difficult to find. It is generally composed of dry grass, carelessly thrown together and kept in its place by the weight of a few dead sticks, and, to finish up the work of art, a scanty lining of feathers is added.

When the same site is used for several years in succession, the mass of material often forms a platform of considerable size.

They usually lay from four to six eggs, though as many as eight have been found. As is the case with most Hawks, the period of incubation is about four weeks, in no case does it vary more than a few days. The male assists the female in incubating the eggs and in feeding the young. During the time the young are being fed, the male often drops the food to the female from a considerable height as he passes near the nest, she darting upward and catching it before it reaches the ground.

The Marsh Hawk fights with great fury to protect its young from intruders and has been known to attack persons. After the young are reared and leave the nest, they remain together and, as fall advances, several families unite and fly southward. For this reason it is not unusual, during the fall, to see forty or fifty individuals at one time, scattered over some extensive marsh.

When the Hawk discovers prey, it poises for a moment and then drops quickly upon it. If unsuccessful, it is sure to beat over the same place again before leaving.

The food of the Marsh Hawk consists largely of field mice, ground squirrels, frogs, snakes, lizards and small birds. They also occasionally carry off poultry and game birds, though its economic value as a destroyer of pests is so great that its slight offense should be pardoned. Unfortunately, however, farmers and sportsmen slaughter it at sight, ignorant of the fact that it is a faithful slave that he is killing and that it pre-

serves an immense quantity of grain, thousands of fruit trees and a large number of game birds' nests by destroying the vermin which eat the grain, girdle the trees and devour the eggs and young of the birds; but it seems an impossibility to impress this fact upon the mind of any farmer or sportsman.

The Marsh Hawk is the most beneficial of all Hawks and should be protected by law.

ROBT. R. SCORSO,  
Afton, N. J.

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#### The Plain Titmouse.

On May 16, 1890, I thought I had found a Sparrow Hawk's nest in a large sycamore, so I started to climb to it.

At the base of the first limb was a hole, and upon putting my hand in it I heard a hissing noise similar to that which an Owl makes, and as I did not want the Owl, I poked a stick in the hole, and in a few moments a small bird flew out, which I supposed, in the twilight, was a Pygmy Owl, and, upon examination found four eggs in the nest, which proved, however, to be those of the Plain Titmouse. One egg is white; two are very slightly dotted over with light brown and the other one is very thickly spotted and slightly blotched with light brown.

They average in size .65 x .51.

The nest was composed of wool and feathers.

I afterwards visited the nest (on June 10th.) and hearing the hissing noise I this time caught the bird and after examining it; let it go.

As near as I can remember the color was gray throughout and very plain as the name indicates.

It had a crest on its head.

The nest contained two young and two fresh eggs.

FRED A. SCHNEIDER,  
Santa Clara Co., Cal.

# THE OÖLOGIST

A MONTHLY MAGAZINE DEVOTED TO  
ORNITHOLOGY AND OÖLOGY.

FRANK H. LATTIN, ALBION, N. Y.

EDITOR AND PUBLISHER.

NEIL F. POSSON, MEDINA, N. Y.

ASSOCIATE EDITOR.

Correspondence and items of interest to the student of birds, their Nests and Eggs, solicited from all.

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Single Subscription, - - - 50c per annum.  
Sample Copies, - - - - - 7c each.

The above rates include payment of postage by us.

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All subscriptions must begin with either January or July issues.

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FRANK H. LATTIN,

ALBION, Orleans Co., N. Y.

Articles, Items of Interest and Queries for publication should be forwarded as early in the month as possible and can be mailed to either the Publisher or the Associate Editor, as you may prefer.

ENTERED AT THE POST OFFICE AT ALBION, N. Y., AS SECOND-CLASS MATTER.

## Findings.

"Recollections of General Grant" by George W. Childs, a small and interesting book contains many reminiscences of the life of that great General and many of his noteworthy sayings.

It also contains an account of the presentation of the portraits of Generals Grant, Sherman and Sheridan at the U. S. Military Academy, West Point. Its reading matter is highly instructive and entertaining.

"The Wisconsin Naturalist" published by Charles F. Carr, Madison, Wis., makes its debut into the world of literature with its Vol. I. No. 1 dated August, 1890.

It is devoted to Natural History in general and its initiatory number con-

tains many sound articles covering sixteen pages.

It evidently "means business" and we wish it the success which a journal carried out on the plan of Vol. I. No. 1 justly deserves. It is a monthly.

"The American Fish and Game Warden, and Sportsman's Journal" also takes its beginning with the August number, and hails (as a monthly) from Kalamazoo, Mich., under the management of E. E. Thresher. Its ten pages are devoted to the "protection and propagation of fish and game," and on this account, if for no other, it should meet with the hearty support of every true naturalist. It also seeks to interest the sportsman. Success to it.

In the *Detroit Free Press* of July 27th, under the title of "A Feathered Bandit" is an article on the Crow by J. Claire Wood which is of sufficient merit and originality to mention here. The Crow's intimate knowledge of the powers of a shot-gun at first sight, is brought out, and the article accurately gives many of this wise bird's characteristics.

"Mistakes will happen in the best regulated families." If the degree of regulation of families (so to speak) varies directly as the number of mistakes made, then we must be a pretty well regulated family, for we surely make mistakes enough. This time it was in the Book Review of the August number and all on account of that little letter *r*. That little letter which is so misused by being put in "dog" and left off of "car," made the most serious mistake of all this time. In reviewing "Bird Ways" by Olive Thorne Miller, in haste we looked at the name of the author and, behold we got it Olive-r Thorne Miller and then went on speaking of the author as *he*; and all on account of an *r*; nor did we discover our error until some of our readers called our attention to it. We heartily thank those readers and humbly ask the forgiveness of all interested. Yea, verily, we are a well-regulated family; (and regulated should be spelled with a capital R.)

"A new use for the phonograph has been hinted, the suggestion having been made that it might be possible to



record the songs of birds, and that one while sitting in one's own house might listen to the warbling of the least neighborly feathered prima donna. That would seem to put within the reach of sluggards the delights of the morning concerts that have been the peculiar perquisites of the naturalist, who gains his luxury at the cost of toil. But we fancy that a true lover of birds, like one of our contributors, would say that the phonograph could not reproduce the gorgeous morning sky, the sparkling dew, the freshness of the air, which give to the concert its setting, and that he would remind us that effort is always an essential ingredient in the full enjoyment of anything."—*The Golden Rule*.

We commend to the earnest attention of our readers, the article commenced on the first page of this issue, on "The Use of the Camera in the Field" by E. S. Cheney of Pitrodie, S. D. It is well worthy the careful perusal of all. The use of photography in the study of ornithology presents a new line of study which has only begun to be exercised, and one which promises much and has great possibilities before it. Mr. Cheney tells us in this number something of what may be accomplished. We hope to illustrate the October chapter of his article with several life-like engravings from the bird-world.

We are greatly indebted to Mr. Cheney for being able to present this interesting and important subject to our readers in so vivid a way.

#### Popular Pot-pourri.

N. L. Davis, Brockport, N. Y., writes: "It has been thought by several of our ornithologists that the Sharp-shinned Hawk did not breed in this locality, but on June 4th, while on a short collecting trip, I took a set of four fresh eggs of this bird. The nest was situated in a cedar tree about twenty feet from the ground.

[Mr. L. Reed, of Gaines, N. Y., brought us a beautiful set of four eggs of this bird collected within one mile of that village in '89. The first Hawk we ever shot was a Sharp-shinned and in the month of June. Ed.]

A. D. Pierce, Denmark, N. Y., relates the taking of a *white* swallow. It was

wounded but slightly and is in captivity.

The conjecture of G. M. W., Gibbon, Neb., in last issue that the bird called "Rink" was the Chewink, is doubtless correct as it has been confirmed by several others.

C. B. Vandycook, Odin, Ills., states that he has frequently heard the Chewink called by that name as well as by the name "Crank-Crank," which resembles the note of the male.

"At a recent meeting of the American Ornithological Union, Ernest E. Thompson, of Canada, said that some birds, especially sparrows, have ventriloquial powers. Birds, when surprised in the act of singing, will be silent for a moment, and then give forth a faint song that seems to come from a distance, though the singer be not further than ten feet away. Thrushes and robins, the lecturer said, also have this power."—*Clipping*.

William Brown, Hebron, Ill., reports the taking of an albino Meadowlark which was entirely white above and pale yellowish below, with pink eyes and very pale pink bill and feet.

Ed. Van Winkle, Caro, Mich., writes: "While out for a walk to-day, (Aug. 10th,) I found a nest of the American Goldfinch placed in a crotch of a small maple, consisting of three twigs in which was placed; first, an egg upon the bare twigs, and over this was built the nest which contained five eggs. The egg (out in the cold) being plainly visible and, upon my lifting the nest, it rolled out into my hand."

Sets of five eggs of the Prairie Horned Lark are apparently not so unusual after all, judging from the number that have been reported.

H. C. Mark, Davenport, Iowa, reports a set of five fresh eggs of this bird taken May 11, 1890, in Douglas County, Nebraska.

A. O. G., Lawrence, Kansas, writes: Several days ago, upon breaking open an egg of the humble and despised (in the OOLOGIST'S opinion) *Gallus Domesticus*, I was somewhat sur-

prised to find an egg, perfectly formed, within the one I broke. The egg is almost round, about 1. x 1. in. This is the second case of the kind in my experience. I have one egg in my collection which I procured several years ago, from the inside of another egg, which is about the size of a buck shot, and as round. The two, which I now have in my collection, and one other, are the only instances of the kind of which I have ever heard. It eclipses, double yolk and runt eggs. I would like to hear from collectors and observers whether this peculiar formation has been noticed by others?

#### Our Question Box.

Queries to be answered in these columns should be written on a postal or slip of paper—never mix them in your letter when writing about other matters.

M. H., Warren Heights, O.—Your bird with black head, back, breast and beak; black wings with white on tertiary quills and primaries; having white in the outer webs of the outer tail feathers, reddish-brown or chestnut on the sides under the wings, and red iris; is the Chewink or Towhee.

C. H. M., Pittsfield, Me.—1. Your covered nest of grass and hair found on the ground, with white eggs spotted with red and blue, the bird being olive-brown with white-streaked breast and golden crown, is doubtless the Golden-crowned Thrush or Oven-Bird.

2. The "books" say that the Hudsonian Chickadee breeds from Northern New England northward. Does anyone know of its breeding in Maine?

3. Davies' says the White-bellied Nuthatch not infrequently raises two broods in a season. He says the same thing in regard to some of the Chickadees and Titmice.

G. A., Intervale, N. H.—Your description of a bird six inches long, with black head and breast, slaty back and wings, and abdomen white; reminds us of the Slate-Colored Junco.

M. Van W., Greta, N. Y.—1. Your bird seven inches long, light-brown above and white tinged with buff beneath, with brown-spotted breast, laying four blue eggs; nest in a berry

bush, three feet from the ground; is like the Wilson's Thrush.

2. The Ruby-throated Hummingbird is the only Hummingbird found in New York State.

3. Your nest similar to that of the American Goldfinch, the eggs being about .69 x .50, white tinged with blue, spotted and blotched with brown and lavender; may be that of the Yellow Warbler.

A. D., West Point, Miss.—A mere description of an egg, without any information concerning either the nest or bird, is never sufficient data to name the owner. Consequently we cannot answer your queries.

F. S. W., Taftsville, Vt.—Your small Woodpecker, spotted and striped with black and white, is the Downy Woodpecker. The one similar in plumage but larger in size is the Hairy Woodpecker.

L. B., Raleigh, N. C.—1. Cannot tell from your description.

2. Your nest may be of the Yellow Warbler. The Carolina Chickadee nests in holes in trees.

3. The nest of the Carolina Wren is a coarse structure made of strips of corn-stalks, grasses, hay and leaves, with an intermixture of the silk of corn; the lining is of chicken feathers, fine, dry grasses, and horse hair. It is placed in holes in trees, or in wood-piles, and in low bushes; sometimes in the nook or corner of a barn; occasionally in bird-boxes; often under an accumulation of brush-wood. Sometimes the nests are arched over or dome-shaped, the opening being only large enough to admit the bird.

W. E. A., Benson, Vt.—1. The description you give will apply very accurately to any number of different birds.

2. and 3. See answer to A. D's query in this column.

O. M. S., Whitewater, Wis. says:—"I should like to ask of those whose experience in taxidermy has been greater than mine, what they do to rid the skin of the vermin with which they abound? I dislike them much." Who will tell him?

H. M., Hamilton, Ont.—Cannot your egg of a light pea-green, speckled with black, cinnamon, and lavender shell-markings, measuring about .80 x .55, be an egg of the Cedar Waxwing? It is difficult to tell without any description of nest or bird.

[NOTE:—We are behind with our queries. The few queries remaining unanswered as we go to press will be answered by mail or else in October OOLOGIST.

### Lost Opportunities.

Of all the amateur sports and pastimes I have had the pleasure of participating in, I find photography one of the most interesting and instructive, and as an amateur naturalist, I have spent some of the most delightful hours of my life with a camera. When I go to the woods or visit the rivers and marshes, the camera is now my constant companion, for I find in it far more pleasure than the gun can afford.

Nearly every season when the rivers and lakes get their first glassy coat and the cold blasts of approaching winter sweep across our prairies, the Geese, apparently surprised at the sudden change, congregate in vast flocks and depart southward, and at such times I have seen nearly a thousand in a single flock. Such a sight would make a grand picture which sportsmen as well as naturalists could not help admiring. Ducks which have tarried too long often get caught by a cold wave and can be found trying to keep the ice from closing in on them by constant swimming about its edge, and at such times are less inclined to fly, allowing a person to get near enough to use a detective camera on them.

During a duck-hunt at one of the most pleasant lakes in this locality, in the fall of 1887, I had the pleasure of surprising a small flock of White Pelicans as they were feeding among the sedges which were growing in shallow

water and near a point of land running a short distance into the lake. I approached them, under shelter of the trees, to within ten rods and found them busily engaged, scooping up the minnows which were so plentiful. It was a grand sight and I could not help admiring it; but they soon discovered me and raised their wings to depart and it is scarcely necessary to state that I did what every naturalist would have done whose collection did not include one of these birds, I took the life from two of them. How much more pleasure a picture of them would have given me than the mounted bird ever can.

While visiting a colony of Western and American Eared Grebes, during the spring of '87, I saw some of the finest sights that ever came under my observation. There were not less than 50 pairs of the former and 150 of the latter breeding in separate colonies.

The Western Grebes were mostly confined to the furthestmost point of rushes extending into the lake. I paddled my little canoe through a neck of rushes connecting the breeding ground with those growing nearer shore. The little boat made very little noise which was drowned by the breeze rattling the rushes and many a Grebe was caught napping. One bird stood upright to get a good view of the intruder and then with a graceful dive she disappeared leaving scarcely a ripple. Others quietly slipped from their nests and soon their notes could be heard just outside of the rushes, where they were trying their best to charm me. Well I *was* charmed by the lovely sight. There were nests nearly touching each other and with a bird here and there, as seen when I first beheld the sight, it would have made a picture that was complete.

I then visited the other colony, but it covered such a large space that I saw but few of them before they left their

nesses and as I passed among the nests, which was almost impossible to do without running over some of them, I found the eggs in many nests were covered and as I neared the other border they became more so. The Eared Grebes fairly swarmed in open places and in the lake beyond the rushes. Many fine views could have been taken with a detective camera which would not have been possible with the other styles.

I have said nothing about what has been accomplished, but merely mention a few opportunities which were lost by leaving the camera behind. I could mention hundreds of fine views of the birds in their retreats which were within reach of the camera and which have come under my observation during ten years residence in Dakota; but space and time will not permit.

"ALMON"

#### Do Birds die with Consumption?

In answer to the "hectic" question of L. E., Fairview, Mo., in the May OOLOGIST, I would unhesitatingly answer yes. I will look at this question not only from a scientific but from a medical standpoint.

What is consumption? It is a disease characterized by a general wasting away of the entire system, and especially by the formation of tubercles usually within the tissues of the lungs, but by no means confined to the lungs, the tissues thus affected breaking up more or less rapidly and sloughing off, leaving cavities.

The primary cause of the disease being one of the bacteriae, the lowest forms of plant life, only seen by a powerful microscope and remarkable for their spontaneous motions which make some people think they are animals, the one causing consumption being *Bacillus tuberculosis*.

These minute plants are one-celled,

and multiply with most amazing rapidity, simply by budding or by each, soon dividing into two pieces.

Now consumption is by no means confined to man, among animals the monkey and cattle tribes being especially subject to its attacks, and any bird or mammal getting these bacteriae within its system would be very apt to die with consumption. Possibly some of the cold-blooded animals might also suffer from consumption, but this I doubt as I believe these bacteriae require too high temperature for their development in a cold-blooded animal. So L. E.'s parrot probably died with consumption.

WILFRED BROTHERTON,

Oakland Co., Mich.

[Mr. Brotherton has given us a very good explanation of the process of the disease of consumption. Were *Bacillus tuberculosis* to be found in any bird or animal, then of course the evidence would be conclusive that that bird or animal died of consumption. Has anyone found *B. tuberculosis* in any bird? Can L. E., of Fairview, Mo., tell us whether or no his parrot presented it on examination by the doctor?—Assoc. Ed.]

#### The Magnolia Warbler.

(*Dendroica maculosa*.)

Of all birds my favorites are the warblers, and of all the warblers my favorite is the Magnolia. "But why", someone asks, "this preference? To be sure he is a handsome little fellow with his rich dress of black and yellow but then, he is so common that this soon loses its charm and his only vocal effort is a sharp chirp." Ah! in those last few words you named his chiefest charm, for it is not as people usually see him but in his summer home that all his good qualities appear. My truly intimate acquaintance with him commenced among the bushes and ever-

greens of the island of Mackinac where during the summer of 1890 he occurred in unusual abundance. I knew that the Magnolia Warbler should be found there but it was only after two days' search, when I was wandering along an old unused road, almost lost in the overhanging bushes, that I discovered the bird. From the top of a low evergreen a new note issued, *prut pura pura reoo*, a business-like song with a strong metallic accent rising and falling in the last two syllables. I had no difficulty in finding the owner as he frequently sallied forth, either to seize a passing fly or to drive away some audacious Redstart or other small bird, for our friend is very pugnacious and allows no intrusion on his chosen domain.

Having eaten his fill he flew to a small dead sapling and devoted himself exclusively to vocal effort. While in plain sight he repeated the song just mentioned two or three times in rapid succession, pausing a few moments, apparently to note the effect of his words. I turned to leave, thinking the performance over, when I heard a clear falsetto whistle, different in tone from any bird-note I ever heard. Having thus reclaimed my attention he gave the second part of his varied *repertoire*, a soft warble of the same falsetto tone of voice, *purra e hora*, and I have at last found a warbler that warbles. But this is not all, while his hand is in he intends to show off all his fine songs before the reporter of the same, much as the females of the human species show off all their fine dresses before the reporter of a newspaper. After a slight pause to enable me to jot it down he utters a sharp *prut-ut-ut-ut-ut* in the same falsetto tone.

He evidently likes the effect of this, for he repeats it several times in a low tone, commenting on it by a harsh *de kay kay kay*, like a miniature Blue Jay. What more developments there would

have been I am unable to say for at that moment my dog, which I had left carefully at home came bounding and crashing through the bushes, putting my pretty performer to flight. I have heard the same songs singly many times since, but never all from the same bird. When in the deep evergreens and out of sight this talented bird utters two quick, sharp notes followed by a warble of three notes, the middle the highest, *prut prut purreeoo*. In closing the list I will mention the one least liable of all to be recognized; issuing from the evergreens by the side of the road, to careless ears it might sound like the summer song of the Redstart, *cheeweech cheeweech cheoo* but the difference is very appreciable on comparison, for does not the Redstart say *weechy weechy weechoo*?

During migrations, as I have before intimated, the bird is nearly silent, being found among the low evergreens and tracts of scrub stuff. He seeks his food among the twigs, and even on the ground. Among other virtues he is very punctual, the seventh of May is the set time for his arrival in Kent County and he is always on hand on or near the appointed day.

"All this talk about a bird with never a word about its nest and eggs!" the same someone remarks in surprise. To be sure, many of our oologists think altogether too much of the eggs and never get beyond a bowing acquaintance, knowing the bird by sight perhaps, as is necessary for the identification of the eggs, but never taking the time or trouble to become really conversant with his ways and songs. It gives more pleasure to a true bird lover to discover a new song of one of his favorites than to find its nest and eggs.

Now do not gather from the preceding lines that I am not as enthusiastic a collector as the best, a new skin or set of eggs delights me as much as other people, but I think a collection is of

little value unless it represents a vast amount of knowledge of something besides book-lore.

STEWART E. WHITE.

Macinac Co., Mich.

[LATER.—Aug. 7, 1890. When I wrote the above article on the Magnolia Warbler, I supposed I had included all the songs and notes of this bird. At the present date, however, a new one is all the rage among the males; it is a harsh "k-e-e-dl," the last syllable higher by a shade, quick, and subordinated to the first part. It is the prevailing note now, only a few of the songs above described being heard.]

STEWART E. WHITE.]

#### Wilson's Plover at Home.

This interesting member of a large and populous family has been, I think, sadly neglected in the various publications devoted to the interests of his race. Certainly such treatment is undeserved, for unlike his more exclusive and aristocratic relations, he is a regular summer visitor along our hot and sandy shores, and as such, is entitled to respect and consideration from all true oologists.

In few localities, I imagine, can these birds be found and studied to better advantage than along the Virginia coast in the vicinity of Cape Charles.

The long string of flat, sandy islands stretching northward from this point are practically uninhabited and here the birds lay their eggs and rear their young unmolested.

Early in May, the eggs are laid and from then onward to the latter part of June they may be found, in cases where the first set has been destroyed. Three eggs usually constitute a set, although occasionally but two are laid and I have yet to see or hear of a nest containing four. They are laid directly on the bare sand, and will be in most cases, neatly encircled by a ring of

broken bits of shell, making altogether as pretty an oological sight as one could wish to see. Conspicuous enough it seems when once the eyes rests upon it, and yet the whole arrangement harmonizes so well with the broken sticks, shells and other debris along the beach, that the "nest" will be only found by accident or by long and patient search.

If the birds set at all during the day, which almost seems doubtful, they are careful enough to leave long before the collector draws near, and usually his first intimation of their presence is an anxious, plaintive note frequently uttered, and, looking carefully, the birds may be seen some distance away. They quickly spread the alarm and other pairs breeding in the vicinity join the first until a dozen or more may be seen at a time running on ahead and stopping every now and again to look back, all hands meanwhile keeping up a vigorous protest against the unwelcome intrusion.

In certain cases where the sand is bare and soft, an isolated pair can be tracked to the nest, but as the birds are apt to choose a place well strewn with shells, and as they are, moreover, of a neighborly disposition, tending to keep house in company, the whole place is generally a mass of indistinguishable footprints.

Of the eggs themselves little need be said except that they present remarkably little variation in color and marking, but differ considerably in shape, being in general less pyriform than most waders.

This species is one of the few in which there seems to have been diminution in number during the past three years.

Gulls, Terns and Skimmers are shot for their plumage and robbed of their eggs at a rate which threatens their extermination; Willets are shot while breeding and their nests depleted on all

occasions; but the dull-colored "Sand-bird" is too small for the gunner, while his little nest but seldom comes under the observation of the rapacious fisherman as he gathers his boatload of eggs.

THEODORE W. RICHARDS,  
Washington, D. C.

### Book Review.

#### North American Birds.—H. NEHRING.

4-to. Milwaukee, Wis., Published by George Brumder. Part III.

Nehring's *North American Birds* is published in twelve parts of from forty to forty-eight pages each and is illustrated by thirty-six colored plates (three in each part.) This excellent work is so simply, beautifully and accurately written as to render it, at the same time, both highly scientific and generally popular.

What little of technical matter there is, is printed in smaller type at the end of the biographies. The author says what he has to say in a simple and very interesting manner, and relates his own field-experiences in a very entertaining style. But from the general to the specific; Part III. takes up the Gnatcatchers and Kinglets where Part II. left them and finishes the family. It opens with a life-like colored plate of the nest of the Blue-gray Gnatcatcher with the female on it (or in it) and the male on an adjacent twig.

The family *Sylviidae* is followed by the *Paridae* and *Certhiidae* and the *Troglodytidae*, which latter family is not finished in Part III. The second plate of this part represents a group of Thrushes, viz. the Robin, Hermit Thrush, the Varied, Wilson's, Wood and Olive-backed Thrushes; a very natural appearing and pretty group. Some might think the Robin's breast a trifle too bright of red, but if they do let them say so; we will not speak for them. The other plate presents a various group, comprising the Cedarbird, Tufted Titmouse, Phoebe, Brown Thrasher, Bluebird male, Bluebird female and Song Sparrow.

As to the biographies themselves, they are given in such a pleasing and poetical way as to make the work an exceedingly entertaining one to the general reader, while the care and accuracy with which they are written make it of great value to the advanced student of birds. The twelve parts,

when complete, will constitute a most valuable work on the Birds of North America.

[NOTE: Part II, although received by us many moons ago, has, through a negligent oversight, been allowed to pass unnoticed. It will be spoken of next number.]

#### Birds in the Bush.—BRADFORD TORREY.

In Riverside Library for Young People, 16mo. \$1.25. Boston: Houghton, Mifflin & Co., 1889.

This is also written to suit the popular mind, as might be judged from the title. The author's opening chapter is entitled "On Boston Common" and in this chapter he tells his readers of the many birds that may there be found, contrary to the statements of many, who assert that there are no longer any birds in our city grounds. Boston Common, judging from what the author finds there, is not a bad place for observation.

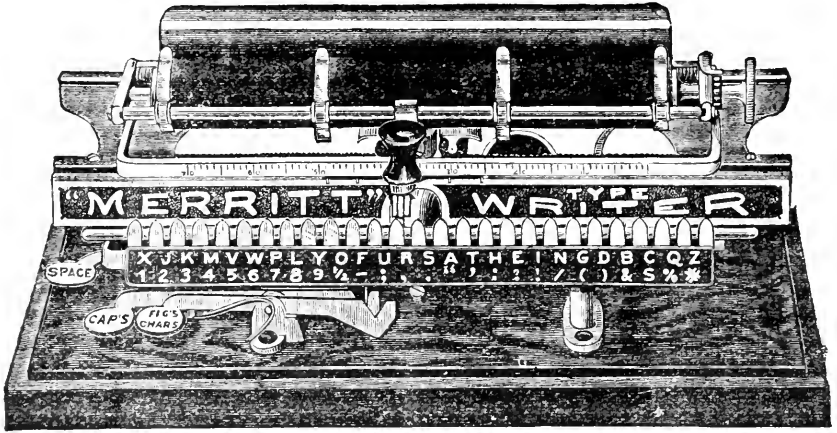
The chapter on "Character in Feathers" is a marvel in the way in which human temperaments and dispositions are shown us in the birds. A most pleasing feature of the chapter "In the White Mountains" is the mention made of the White-throated Sparrow and the remarks and descriptions made and given concerning its song.

The titles of some of the other chapters are: "Bird Songs," "A Month's Music," "Winter Birds about Boston" and "A Bird-Lover's April," the last mentioned beginning, as the author states, on the 29th of March. This last mentioned chapter is replete with the pleasures which an ornithologist experiences in waiting and looking for the spring-birds and in recording their arrivals.

"Birds in the Bush" is a most valuable addition to the book-shelf of any reader and to one who is at all interested in the feathered folk it is doubly so.

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# THE OOLOGIST.

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Vol. VII,

ALBION, N. Y., OCT, 1890.

No. 10


## Exchanges and Wants.

Brief special announcements, "Wants," "Exchanges" inserted in this department for 25c per 25 words. Notices over 25 words, charged at the rate of one-half cent per word. No notice inserted for less than 25c. Notices which are merely indirect methods of soliciting cash purchasers cannot be admitted to these columns under any circumstances. Terms, cash with order.

Please insert in OOLOGIST that I received so in my letters and postals in answer to my exchange notice, that I could not answer them all. JOS. P. JACKSON, Kelton, Ches. Co., Pa.

I have received 15 letters and cards in one day in answer to my notice in the OOLOGIST. N. BRADT, Eagle Harbor, N. Y.

My exchange notice paid me big. Have exchanged about \$100.00 worth of specimens. W. E. SNYDER, Beaver Dam, Wis.

 CAUSE.—A single notice or adv. in the OOLOGIST costing from 25 to 50 cents.

WANTED.—To exchange first-class complete sets of this locality for those of others. All letters answered. L. L. KNOX, Giddings, Texas.

EXCHANGE.—Arabian Knights, People's Edition, New, (cloth, 450 pages, for second-hand copy of "Davie's Key," 4th edition, or "Maynard's Eggs of North American Birds," JESSE NICHOLLS, Tuscaloosa, Ala.

EXCHANGE.—I will give ten different sets, (42 eggs) for every set of Owls' or Hawks', except 33 and 36. Send at once to WALTER BRADFORD, Mayfield, Ky.

WANTED.—Eggs in sets of the following: Lattin's List, A. O. U. Nos., 2, 11, 13, 27, 30, 32, 58, 74, 77, 80, 130, 197, 199, 200, 378, 452, and Black Crowned Night Heron. For these I will give eggs in sets and singles. Address, J. P. FEAGLER, Waterloo, Indiana.

WANTED.—Arrow heads and Indian relics; also Confederate money and stamps. For the above will exchange first-class eggs. JOHN W. INGALLS, Box 121, Morgan Park, Ills.

WANTED.—Cones' Key, fourth edition; Davie's Naturalist's Manual. To offer: eggs of Woodcock, Bartramian Sandpiper, Whippoorwill, Red, Great Horned Owl, Cooper's, Red-tail, Red-shouldered Hawk, and many others. C. BYRON VANDYCOOK, Odin, Ills.

WANTED.—Good minerals, fossils, curiosities, Indian relics, etc. Will exchange specimens and eggs; or, will pay cash for desirable specimens. ERNEST S. PARK, 829 18th St., Des Moines, Iowa.

WANTED.—Birds' eggs in numbers, Grackles, Blackbirds, Thrushes, Fly-catchers, Woodpeckers, Owls, etc. Will exchange Taxidermy outfit. (see ad. in Sept. OOL.) birds' eggs, skins, or mounted birds. Address, E. W. MARTIN, Medina, Ohio.

WANTED.—A good shot gun, egg cabinet, book case, back Nos. of "Auk," and "Ornithologist and Oologist." Will exchange eggs or will mount any bird to order for any of the above; also want first-class eggs in sets for Taxidermal work or first-class eggs. W. INGRAM, Odin, Ill.

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TO EXCHANGE.—Collection of minerals, Size, less than one in, to over three; also \$22 Model Press and outfit, 5 good fonts of type, \$25. For particulars, address ROBT. T. YOUNG, Chestnut Hill, Phila., Pa.

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TO EXCHANGE.—A set of boxing gloves, in good order, valued at \$5.00, and a pair of fencing foils and masks, valued at \$4.00, for best offer in eggs in sets with data. WM. T. SMITH, Box 94, Wayne, Del. Co., Pa.

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SINGLES OF 132, 140, 190, 214, 280, 305, 337, 494, 497, 546, to exchange for sets with data, marked with A. O. U. Nos. JOSEPH CRAIGUE, Jackson, Minn.

**EXCHANGES AND WANTS, Continued.**

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TO EXCHANGE.—750 Foreign stamps, 200 different, in album. Also 100 cigarette pictures, for best offer single Western or Sea birds' eggs. I have a few sets for sale or exchange cheap. Address, WILLIE E. PIERCE, 19 Sommer St., St. Johnsbury, Vt.

TO EXCHANGE.—Youth's Companion from January to July, 1890, for pair of climbers, Davie's Key in cloth, or good taxidermist's outfit. Also have first-class eggs to exchange. PERCY WILLIAMS, Box 212, Redlands, Calif.

FOR EXCHANGE.—1st class sets of Iceland Gull, Franklin's and Mew Gulls; also following Ridgway's Nos.: 20, 55, 69, 279, 290, 396, 416, 505, 518, 549, 614, 630, 636, 660, 667, 664, 662, 705, and others. Only 1st class sets wanted, with full data. Send your full list of duplicates to W. RAINE, Hayden St., Toronto, Canada.

CALIFORNIA minerals, curiosities, shells, and eggs to exchange for other minerals, etc. Send list and receive mine. CHAS. M. GOETHE, 1011 Fourth Street, Sacramento, California.

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TO EXCHANGE.—For eggs in sets or Irish Setter, or pointer dog, well broken or Ruffed Grouse, a No. 3 Ballard 22-cal. rifle, pistol grip, nickel butt plate; also Columbia light roadster Bicycle, ball bearings to both wheels and pedals, cow-horn handle bars, spade handles, black rubber tire, a first-class wheel in every respect, never had to pay out one cent for repair, run one season and is in as good shape as when sent from shop. Will sell either of above at a bargain. Eggs in sets for same. Sent list, H. W. DAVIS, North Granville, N. Y.

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I WILL GIVE \$85.00 of Confederate money for every \$1.00 worth of first-class eggs with data sent me. I will exchange \$85.50 of Confederate money for best offer of first-class sets with data. What offers? All answered. Address, THOS. A. SMITHWICK, Plymouth, North Carolina.

100 FINE PRINTED envelopes with your name, business, address, etc., for every set of eggs sent me worth seventy-five cents or over by Lattin's 1890 price-list. F. W. MCCORMACK, Leighton, Ala.

PENNSYLVANIA Geological Reports (full sets or odd vols.) shells, particularly those of New Jersey coast, and birds' eggs, for sale or to exchange for books, natural history specimens, optical instruments, or offers. CHAS. LER. WHEELER, Cape May, N. J.

YES.—YES.—In answer to the hundreds of letters I have received, I will exchange my taxidermy outfit for birds' eggs in quantity. Send your lists, Oologists, and learn taxidermy. Address, E. W. MARTIN, Medina, Ohio.

COPPER SPECIMENS.—Iron, Copper and "Spar" prepared in bottles, to exchange for stuffed birds, animals, chistolite crystals, Indian relics, marine curiosities. What have you got? IRVING SHIELDS, Box 211, Hancock, Mich.

TO EXCHANGE.—\$1.00 worth first-class birds' eggs; Air Repeating Rifle, shoots 45 times without reloading, value \$9.00; two varieties Petrified Wood, to exchange for Taxidermist's Outfit, or first-class birds' eggs in sets with data. Will sell Rifle for \$1.00. A. WETZEL, Hubbell, Thayer Co., Neb.

WANTED.—Valuables of most anything for sets of Fish Hawk and Buzzard; singles, Eagle, Least Tern, King-fisher, Bull Bat and others. All letters answered. F. THEO. MILLER, Heathsville, Va.

WANTED.—In large or small quantities any of following eggs, viz.: Any water birds, such as Gulls, Terns, Herons, Cormorants, Pelicans, Rails, etc. Also Hawks or Owls, in fact any good eggs. Especially need following numbers Ridgway's: 473, 477, 493a, 494, 492, 8c/s with data especially needed. Send full exchange list at once to H. E. PENDRY, Eustis, Fla.

I HAVE singles of the following to exchange for Books relating to Geology, Mineralogy, Conchology, Natural History and allied scientific works. A. O. U. Nos., 4, 6, 7, 201, 212, 214, 221, 289, 300, 305, 310, 316, 325, 333, 337, 390, 366, 378, 390, 394, 402, 406, 412, 413, 444, 447, 448, 456, 467, 474, 474b, 477, 488, 490, 495, 495a, 497, 498, 499, 500, 501, 501b, 506, 507, 510, 511, 519a, 552, 552a, 560, 560a, 563, 581, 587, 593, 595, 604, 610, 612, 616, 619, 622, 622a, 622b, 624, 633, 652, 681, 683, 703, 704, 705, 713, 721, 721a, 725, 735, 755, 761, 761a, 766, 767. All answered. Address, T. S. HILL, Knoxville, Ia.

WANTED.—"Gray's and Coulter's Western Botany," in exchange for "Wood's Class Book of Botany," nearly new; or, Photographs of Mammals, Birds, Nests and Eggs, etc. Write for offer stating condition of book. E. S. CHENEY, Pitrodie, South Dakota.

WANTED.—Best offer for stuffed Eagles, Owls, Hawks, Woodcock, Quail. Wanted for 28-cal. full nickel 10 in. pocket rifle, 5 shot, a 22-cal. Winchester. Letters answered. F. THEO. MILLER, Heathsville, Va.

GREAT! GREAT!! GREAT!!!—Wanted to exchange eggs for anything desirable. What offers? Send stamp for catalogue, stating what you have, to A. L. CHILDRESS, P. O. Box 59, Decherd, Tennessee.

**FOSSILS.**

Will S. Graham, Creston, Ia. [S2]

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Wm. T. Smith, Box 94, Wayne, Del. Co., Penn.

R. W. Patterson, Box 247, Parkersburg, W. Va.

Clark Ijams, 210 E. 19th St., Cheyenne, Wyo.

**BIRD SKINS.**

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**A** FINE BIRD-EGG COLLECTION for sale cheap. Write for particulars. Approval sheets of stamps on application. 33¢ per cent com. JOHN HECK, Raleigh, N.C.

**IMPORTANT!**

Through an error the following offer appeared in Sept. OOLOGIST. It was intended to have withdrawn the offer on Oct. 1st, but owing to the error, we will extend the same until Oct. 25th, at which date it will be withdrawn, never to be repeated.

Faithfully yours,  
FRANK H. LATTIN.

**THE OFFER:  
FOR ONLY \$1.00 CASH,**

We will send

THE OOLOGIST for one year	\$1.50
A Card good for one Exchange Notice	.25
A copy of the Oologist's Hand-book (1885)	.15
A choice Resurrection Plant from Mexico	.15
And \$1.00 worth of anything we advertise	1.00
	\$2.05

We will allow our present subscribers to renew their subscriptions according to this offer—new subscriptions will commence with June issue—old ones one year will be added to the time their present subscription expires.

**FRANK H. LATTIN,**

Pub. THE OOLOGIST, Albion, N. Y.

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**\$100.00 WORTH OF SETS FREE.**

On other pages we have offered many valuable eggs at greatly reduced prices, many species at prices below what we can purchase them at in hundred lots, but as we have them in stock in large quantities, we desire to close them out *at once*. Collectors will observe that larger the order greater the discount, and it is hardly necessary for us to give a "pointer" to our patrons as to the snug little profit they can make by combining their order with that of their friends, thereby, making a large order and giving them a better discount; for example: \$1.00 obtains \$1.50 worth of eggs. Ten \$1.00 orders would make a \$10.00 order which would entitle you to \$25.00 worth; or, a profit of \$10.00 worth of eggs for your trouble of obtaining the ten \$1.00 orders. Surely, a collector could not obtain a snug little collection any easier or at less expense. It would seem absurd for us to make an additional inducement to collectors to obtain their orders after giving a discount of *nearly fifty per cent.* less than usual *wholesale prices*, but in order to show our appreciation for *early orders*, we have concluded to make the first party from *each State, Territory or Country* that sends us an order for \$2.00 worth of eggs, on or before Nov. 15th, a present of a set of one egg, with data, of the Sooty Tern. For the first \$5.00 order, an egg, with data, of the Noddy, and for the first \$10.00 order, a set of *each species*. Remember these presents are given you without any additional expense and the earlier we receive your order the more liable you are to obtain one.

Faithfully,

**FRANK H. LATTIN.**

THE YOUNG NATURALIST'S



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NEW WORK ON TAXIDERMISTRY.**

See Description on page 94, 95 and 96 May number of THE OOLOGIST.

This work will be published only on condition that there are 500 subscribers; also, only that number will be taken. If the requisite number are obtained the name of each will be published in the work. Write at once for subscription blank, proof pages of the illustrations, and for full particulars address

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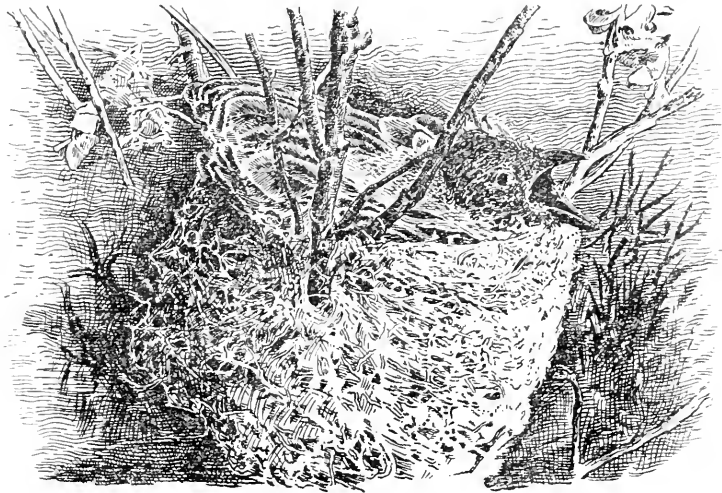
**The Use of the Camera in the Field.**  
*A Study of Nests.*

From year to year more and more interest is manifested in the importance of one of the most delightful and instructive of all studies—the study of nests; and we hope we may, at the present time, introduce into our midst the camera as an assistant in this grand and interesting study, which has undoubtedly been much neglected. It is perhaps a more extensive study than

ology, involving as it does the study of botany and requiring familiarity with all the characteristic plants and trees of our respective localities, but don't let these obstacles detain you, there is so much pleasure to be derived that you will be amply paid for all your trouble.

Here I wish to transcribe in part Mr. Ernest Ingersoll's plea for the study of nests, from his excellent "Bird's Nesting," knowing it will interest you.

"As a scientific study, there is far



NEST OF YELLOW WARBLER WITH YOUNG COWBIRD.

more advantage to be obtained from a series of nests than from a series of eggs. The nest is something with which the will and energies of the bird are concerned. It expresses the character of the workman, is to a certain extent, an index to its rank among birds, for in general those of the highest organization are the best architects, and give us a glimpse of the bird's mind and power to understand and adapt itself to changed conditions

of life. Over the shape and ornamentation of an egg the bird has no control, being no more able to govern the matter than it can the growth of its beak. There is as much difference to me, in the interest inspired, between the nest and egg of a bird, as between its brain and its skull, using the word *brain* to mean the seat of intellect. The nest is always more or less the result of conscious planning and intelligent work, even though it does follow

a hereditary habit in its style; while the egg is an automatic production, varying, if at all, only as the whole organization of the bird undergoes change. Don't neglect the nests then! In them more than anywhere else lies the key to the mind and thoughts of a bird, the spirit which inhabits that beautiful frame and bubbles out of that golden mouth. And is it not this inner life, this human significance in bird nature, this soul of ornithology, that we are aiming to discover?"

After describing, in his charming way some of the beautiful masterpieces

of bird architecture, he concludes his plea with the following remarks:

"We want to know by what sort of skill the many nests are woven together that we find it so hard even to distangle; we want to know how long they are in being built; whether there is any particular choice in respect to location, whether it be a rule, as is supposed, that the female bird is the architect, to the exclusion of her mate's efforts further than his supplying a part of the materials. Many such points remain to be cleaned up. Then there is the question of variation, and its extent in



NEST AND EGGS OF RED-HEAD DUCK.

the architect of the same species in different quarters of a ranging area. How far is this carried, and how many varieties can be recorded from a single district, where the same list of materials is open to all the birds equally?"

In the nests of birds there is evidently a great difference manifested in those placed in various situations and constructed under apparently diverse conditions, in fact a great variation in noticeable in a single district where the same materials and the same induc-

ments "are open to all the birds equally," but when you come to compare with those found in remote localities, (which is comparatively an easy matter with the aid of a series of pictures) you will find the difference so great in some cases that you would hardly recognize the nest as being of the same species.

Undoubtedly young birds are less judicious than older ones which are better qualified, and more experienced, and enabled to foresee some of the per-



ils which some situations present; and I presume that as a rule their nests suffer more from strong wind and violent storms, from not being, I venture to say, as securely fastened. Allow me to illustrate this assertion by the nest of a young pair of Orchard Orioles. They were evidently young of the previous year, and this being their first experience in nesting, it presents many interesting points.

It was a beautifully woven basket, placed in the uppermost branches of a slender willow, apparently unexcelled in workmanship, but coarser in com-

position than any other nest of this species that I ever saw; and proportionally much shallower than nests of older birds placed in such slender trees prove to be. However, they neglected one thing of vital importance, they overlooked the fastenings and the day I first beheld it, (June 21, 1886) it was no longer a place of safety. Ere long their work would have been in vain for then the eggs found barely room in the partly overturned nest.

The nest, now before me, shows no trace of having been fastened in any way, although there was a few straws



NEST AND EGGS OF MARSH HAWK.

which held it in place until the weight of the bird, during a strong wind, had broken them asunder on one side. The material was so much coarser that anyone accustomed to seeing nests of the Orchard Oriole would have noticed it at once, in fact, more than half of it is composed of coarse grass while all other nests to which I have access are composed, almost exclusively, of fine sedges of the genus *Eleocharis* and fine grass blades. Furthermore it proves to be the only true basket-shaped nest

among them, and accurate measuring resulted as follows:

Diameter, outside, 3.25 x 4.25; inside, 2.75 x 1.76. Depth, outside, 3.00; inside, 2.50. The bottom is almost perfectly flat and measures 2.75 x 2.50 inches.

The nest mentioned in my article of September as being found in an odd place, was constructed by a pair in full dress, and is composed of a selection of very small sedge and grass blades varying from .02 to .07 of an inch in width

and a slight mixture of downy willow catkins with a lining of the same. It proves to be considerably smaller than that of the young pair and is deeper. Diameter, outside, 3.25 x 2.80. Depth, outside, 3.25; inside, 2.75 inches. One curious thing about this nest is the weaving, in fact, it is not woven at all on the longest sides, merely cross thatched most of the straws being fastened near the brim of the nest at its shortest sides.

Another nest of an old pair, and of which I have a photograph, is now before me and measures as follows:

Extreme diameter, outside, 4 inches; inside, 3.25. Diameter at brim, outside, 2.75; inside, 1.50. Depth, outside, 4 inches; inside, 2.75. It was securely fastened to several branches of an ash tree within six feet of the ground, and July 4th contained four eggs.

The picture shows the form of the nest and its situation, and where a band of straws were woven around it after it was nearly finished, to make it more secure. It is globular in form and composed of the same material as the last, but a rather coarser selection.

Did it ever occur to you that it was possible to photograph a bird while it was constructing a nest or excavating a hole as Woodpeckers, Sapsuckers and some other birds do? Nevertheless it is much easier than you would suppose.

It is possible to catch the Oriole weaving in those tangled threads, shaping that beautiful specimen of bird art, that cradle for their young. It is possible to catch the Woodpecker chiseling away at that hole while clinging to the tree, or as it stops and listens. It is possible to picture the wren as it fills up the crevice of some decaying tree, bearing in those heavy twigs which seem so large for a little bird to carry, or peeping out to see that there is no intruder about. It is possible to hide a camera where man could not hide with-

out being discovered, and take a picture when you are rods away. It is possible to set the camera in the tree-top and take a picture with it while standing on the ground. All these and hundreds of other methods are possible if your lenses and camera are suited to the work.

For instantaneous pictures at close and medium ranges you need rapid rectilinear, or a portrait lens, but for time exposures at close range a single lens is undoubtedly the best.

Trusting it will interest you, I will endeavor to describe a contrivance of my own construction, a tree tripod in fact, which will securely hold the camera to any tree of reasonable dimensions, or to any accessible limbs, enabling me to secure pictures, which could not otherwise be taken to show plainly, if at all. The top consists of three pieces of three-seventeenths-inch black walnut, each measuring 6 x 7 inches; two cut lengthwise and one crosswise of the grain, the latter being placed in the center to prevent warping. In the center of these a hole was bored to admit the tripod screw for fastening the camera. The three legs; one measuring 52 and the other two 48 inches in length, were worked from an oak slab, and measure at the larger end  $1\frac{1}{2}$  x  $\frac{3}{4}$  inches, tapering to about  $\frac{3}{4}$  x  $\frac{5}{8}$  of an inch, except the longest which is large enough to admit a metal point. This leg is affixed to the top of the center of one of the long sides and near its edge, allowing it to swing back like the cover to a chest. The other legs are beveled off for about 4 inches at the larger end to bring them out of the lenses range, and are fastened at the center of the shortest sides about an inch from their edges, with very small bolts. These bolts being at least two inches from the ends of the legs to make them more rigid.

The legs are independent of each other and will make complete circles if

necessary. On the inner side sharp screws are protruding through; which I call "spurs." Two straps, one on either side, are all that is required to hold them in place no matter how rough the bark may be. After setting it, the camera is drawn up and fastened in the same manner as it is on other styles of tripods and can be turned about in all directions with ease. With the aid of a screw-driver it can be easily affixed to the corner of any wood building for the purpose of obtaining pictures of nests under the eaves or elsewhere; or can be affixed to a win-

dow casing on the outside in the same manner.

For ground work and nests placed in bushes not over one foot from the ground it does very well, but for nests over one foot and not placed in trees it cannot be used, therefore I find it necessary to carry two tripods, and consider myself well off to get along with so little. A ladder or strong rope sometimes becomes a necessity, where there are no suitable limbs from which to get focus. Such feats as setting a camera and getting the focus while clinging to a rope would not be advis-



NEST AND EGGS OF LARK BUNTING WITH EGGS OF THE COWBIRD.

able unless it was to secure a picture of the nest of some rare species, in that case you would be amply rewarded, but in case of a common species it would be much better to seek a nest in a more accessible place.

Pictures will remind us of by-gone days when we rambled through the woods to study the great book of nature, amid dancing sunbeams flitting through leafy branches; amid beautiful flowers exhaling sweet fragrance filling the ambient air with perfume; amid

festoons of grape and woodbine hanging in wreaths and garlands; through fertile valleys with winding brooks and rivulets, some slow and deep, others rapid, murmuring a little trill as they ripple o'er obstructing pebbles or diverging from boulders, only to join again and ripple on toward the ocean. They will remind us of placid lakes, where the wild fowl love to dwell; of almost impenetrable swamps where man seldom intrudes, and of grassy lakes abounding in birds in almost endless variety.

In pictures we may admire at leisure sights which have long since passed away, never to appear again in the same form. Common birds of the present day may in a few years breed frequent remote districts, never to breed near us again, and should we neglect these, we might regret it in after years. Changes are taking place every year and some day you will be disappointed. You may visit former haunts and find the sights you seek are not to be found, and may appear no more where they were once so common.

Don't omit the pictures then,  
Nor the common nests neglect;  
For we cannot apprehend  
Just what changes to expect.

When I beheld the picture of the nest of that beautiful duck *Aythya americana* it reminds me of a lovely morning, June the 21st, in fact following a dismal night with torrents of rain and almost continuous flashes of lightning and peals of thunder; of a pleasant walk through the woods to where the little canoe lay moored; the far distant drumming of the Woodpecker; the lively warble of the Wren and other woodland melodies; a pleasant ride o'er a rippling lake, bordered on either side with wide strips of rush and sedge, and the departure of a gay pair as I approached their nest, which was discovered the previous day.

I can imagine how contented they were with their lot (indeed they could be proud of such a situation.) How the female gathered the material from the surrounds and the down from her breast while her mate was alert to warn her of approaching danger. Bull-rushes (*Scirpus lacustris*) were growing around and their bowing heads sheltered it from the noon-day sun. Through them they could look far off to the eastward to watch the dawning of day and the rising sun. On either side, and not a rod away, was open water, where they could frolic or swim to

their heart's content. What a grand summer's home it must have been!

When I beheld that little picture of the nest of *Circus hudsonius* the mind reflects to a glorious evening when the last diverging radiance of the sun was gleaming over the western hills and little birds were singing their evening songs in praise of a magnificent sunset.

At this time (June 18th) I was returning from a photographic tour in an adjacent county, pondering over the events of the day and the fine scenery which I had viewed, and admiring the sunset. While nearing a small marsh in and about which many species of sedge were growing, and those of the previous year still standing, (around which the road led.) My attention was drawn towards two female Marsh Hawks, which were slowly sweeping about it in search of food. Knowing I had barely time to reach my present destination before dark, and not caring to be caught out on a strange road which had so grown up to grass that it would have been almost impossible to have followed at night. I watched them closely while the horse plodded away. We had probably gone 80 rods when one of them rested her wings for an instant and like a shot vanished from view some 40 rods in the rear. I had no trouble in finding the spot for it was well marked by a patch of sedge, much taller than the rest and of the previous year's growth; but did not flush the bird until I was within ten feet of her. There was the nest in a wreath of mint with sedges to obstruct the view. Unexcelled in form, neatness and composition by any nest of this species that I ever saw, and the site was so well selected, so balmy and shady yet fanned by passing breezes on a sultry day.

The other reminds me of a cloudy day in June, 1889 and a long ride over the prairies dotted with beautiful flowers, spiderworts, tradescantia varying from white and rose color to pur-

ple and blue, lifting their gay heads above the grasses in damp places, displaying their beautifully colored petals. Virginian anemones were growing in the valleys in abundance, looking at a distance like snow banks; wood-sorrel and mallow, beard-tongue and rose, and scores of others too numerous to mention. Then to get some idea of the world in which I was, add to this the almost unceasing songs of birds reaching the ear from all directions and dying away in the distance, none of which excelled the ecstasy of the Lark Bunting (*Calanospiza melanocorys*); those full round mellow notes which fade into sweet cadences of indescribable melody.

While passing a pile of weed-stalks which had been raked from a patch of small trees or whips, a female Lark Bunting evidently having just left her nest, was noticed sitting on a sod a few feet away. Desiring to secure a picture of nest and eggs of this species, I lost no time in hunting up the nest, which, as I had supposed, was placed underneath the rakings, and being placed about 6 inches from the edge there was a nicely arched entrance, which led to its immediate discovery.

Although it was rather an unusual nesting site, the nest was apparently the same as other nests placed on the ground. In this instance a hollow measuring four inches in diameter and two in depth was excavated and lined with "spear grass." (*Stipa comata*), "gramma grass" (*Bouteloua oligostachya*) and other grasses. The finished nest measuring  $1\frac{1}{2}$  inches in depth and  $3\frac{1}{2}$  in diameter on the inside.

The female was exceedingly tame and watched operations from her perch on a sod not two rods away, while the male was contented with a distant view, but I did not trouble them long and after removing the parasitic eggs, left them without further molestation.

E. S. CHENEY,  
\* Pitrodie, S. D.

### The Flathead Field.

It was my good fortune to become a member of the preliminary engineering party that was sent out by the Great Northern Railroad Company into these northern wilds in the early part of February last, and a sore and adventurous time we had of it until winter and snow left us in the latter part of April.

Being an enthusiast in the oological line, I could not but be on the watch for early bird-arrivals, and on the 13th of February, observed my first Robin near Ravallie. Ravallie is the R. R. station on the Northern Pacific road where passengers leave by stage over the Reservation, and *via* steamer on the lake, reach Demersville which is at the head of the valley and the only settlement of consequence in it.

Let me inform the collector that this is an entirely new field and, I believe, very rich in oological specimens. I was prevented from doing much collecting, as my work was of that kind which keeps one busily engaged from early until late; consequently my cabinet has not been enriched to the full extent that I would wish.

The most common birds that breed here, and from many of which I collected eggs, are as follows: Olive-backed Thrush, Catbird, Robin, Steller's Jay, Canada Jay, Hairy Woodpecker, Pileated Woodpecker, Red-shafted Flicker, Rufous Hummingbird, Vireos, Warblers, Flycatchers, Chickadees, Water Thrush, Snowbirds, Finches, Ruby-crowned Kinglet, Magpie, Canada, Ruffed, Sharp-tailed, Dusky and Pinnated Grouse, Red-head, Mallard, Blue-winged and Cinnamon Teal, Pintail, and many other varieties of Ducks. The Hooded Sheldrake is quite common, also Snipe, Plover, Curlew, Loons and Sand-hi! Cranes, Owls, Buzzards, Hawks and Eagles.

Ravens and Clarke's Nutcracker are

very common. A nest of the former was discovered the latter part of March. It was on a high cliff and contained six eggs. These are all the most common residents that occur here.

The breeding places are as follows: Flathead Lake and vicinity, the main valley, Stillwater, Ashley, White-fish, Pleasant and Wolf Creeks, Flathead River and its feeders; also Big Fork and Swan Lakes. The latter, I have been told, is the breeding place of Swans, Loons, Sand-hill Cranes and thousands of ducks and water-fowl.

Island Lake, Loon Lake, Little Bitter Root Lake, McDonald's and White-fish Lakes and many marshes and swamps are famous nesting places. Thus the collector can see what a rich and wide field, that has not been troubled by the "egg-crack" as yet, can be worked over. True, it is a country that is very wild and inhabited by large game and the red man, but there is no fear from either of these, and the country is a beautiful and a healthful one and easily reached; though its trails are, as Horace Greely expressed it, "only known to the trapper and the guide."

G. E. PRINGLE,

Missoula Co., Montana.

#### The Owls of the San Bernardino Valley.

What is the matter with the Owls lately that we don't hear anything of them? Is it because it is not their season? If it is, you will excuse me for these few random notes.

Well, to begin, there are six species of the "Owl Family" that nest in the San Bernardino Valley, to my knowledge. Of these the Western Horned and the Spotted are strangers to me. The other four are enumerated below.

American Barn Owl, (*S. pratincola*) tolerably common. This bird is not very particular about its nesting place, but usually selects some hollow tree or

snag; although I have known them to nest in burrows dug in a sand-bank, occupying the same nest year after year.

The eggs are between round and oval, plain white, usually covered with dirt and stains from the nest as the birds are, by no means, cleanly in their habits.

American Long Eared Owl, (*Asio wilsonianus*) common. Nests mostly in old crow or rat nests and sometimes in hollow trees.

This Owl has a rather weird appearance, especially so when one is passing through a dark patch of timber, and, on looking up, his eye falls on one of these fellows with long ears and large eyes, staring him full in the face.

The eggs of the Long Eared are from three to six in number, usually four. As a rule they approach more of an oval shape than those of the Barn Owl; they are also much smoother and cleaner.

California Screech Owl, (*Scops asio bendirci*) rare. Nests in cavities of trees. All the eggs I have taken of this species were from nicely rounded cavities about two feet deep.

The eggs are white and nearly round. Average size, 1.16 x 1.40 inches,

Burrowing Owl, (*Speotyto cunicularia hypogaea*) abundant. This is a bird that loves the open prairie, I suppose on account of the "fresh air."

A curious habit of this bird is to sit by its hole and watch you as you pass, nearly twisting its head off, rather than to step around; and occasionally giving you a nod but receiving none in return.

There is one habit of this Owl that I have never seen, and never expect to, and that is their keeping company with rattlesnakes.

The eggs are nearly round and plain white. Size about 1. x 1.23 inches.

HARVEY M. HALL,

Riverside, Cal.

# THE OOLOGIST

A MONTHLY MAGAZINE DEVOTED TO  
ORNITHOLOGY AND OOCLOGY.

FRANK H. LATTIN, ALBION, N. Y.

EDITOR AND PUBLISHER.

NEIL F. POSSON, MEDINA, N. Y.

ASSOCIATE EDITOR.

Correspondence and Items of Interest to the student of Birds, their Nests and Eggs, solicited from all.

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ALBION, Orleans Co., N. Y.

\* Articles, Items of Interest and queries for publication should be forwarded as early in the month as possible and can be mailed to either the Publisher or the Associate Editor, as you may prefer.

ENTERED AT THE POST OFFICE AT ALBION, N. Y., AS SECOND-CLASS MATTER.

The Autumn time is with us! Its approach  
Was heralded, not many days ago.

By hazy skies that veiled the brazen sun.

And sea-like murmurs from the rustling corn.

And low-voiced brooks that wandered drowsily

By purpling clusters of the juicy grape.

Swinging upon the vine. And now 'tis here.

And what a change has passed upon the face

Of Nature, where thy waving forests spread,

Then robed in deepest green! All through

[the night

The subtle frost hath plied its mystic art.

And in the day the golden sun hath wrought

True wonders: and the wings of morn and even

Have touched with magic breath the chang-

[ing leaves.]

—Gallagher.

## A Collecting Adventure.

The pathway of the OOLOGIST is not always strewn with roses. Called crank by his friends, chased by dogs and angry farmers, tramping through rain and mud, his lot is not easy. During this last season, a friend of mine and I discovered a Blue-gray Gnat-catcher's nest, in an apple tree, near a farmer's house. We asked him if we could collect them, and he told us if he caught us on his place he would set the dogs on us.

A few days after that we saw his son in town and he had both of his father's dogs with him. Now was our chance, and we lost no time in getting out to that farm-house. There did not seem to be any one at home, but the old farmer was working out in a field in plain view of the tree in which the nest was. How to get the nest and eggs, without him seeing us was the question. The old fellow was a great politician and I thought if I could get him into a discussion he would not pay any attention to what was going on over in the orchard. I went up to him and wished him good-day, and we talked about the weather, crops, etc. At last I got to talking politics. Finally the old gentleman concluded it was too hot to work out in the sun and we sat down under a tree. As good luck would have it, he sat with his back to the orchard. I could see my friend sneaking from tree to tree, fast approaching the one in which the nest was. All the while we were busily discussing the merits of our favorite candidates for '92, Benjamin Butler would have turned green with envy, if he could have heard the ease with which I changed my views to suit those of the old farmer. Just as he was declaring he would bet seven bushels of potatoes that his candidate would get there, I heard the "shrill call of a Quail" far up the road, and I knew my friend had been successful. I bade

the farmer a hasty good-bye, hurried up the road and found my friend had one of the finest nest and set of four eggs of the Blue-gray Gnatcatcher I had ever seen.

We had a good laugh over the successful working of our scheme and started home.

The next day I saw the farmer in town, and asked him how the "Humming Birds," as he called them, were getting along. He said, "young man, while you was a talking politics to me the other day that infernal scoundrel who runs around with you, was a robbing that nest, and I jest tell you, if I ketch you fellers a traipseing around over my farm again I'll have you sent up for trespass." I tried to plead innocent, but all to no purpose. I have never yet felt sorry that we fooled the old fellow, and I have a good laugh every time I see those eggs.

F. J.,  
Martin's Ferry, O.

#### The Ruby-throated Hummingbird.

The Ruby-throated Hummingbird, *Trochilus colubris*, is quite generally distributed through-out New England as a summer visitor. He arrives in Mass. about the middle of May. It is a very interesting sight to watch him darting around from plant to plant, sampling the nectar, which lays hidden in the bosom of the flowers, or hunting for the small insects which form the principal part of his food. There is music in the humming sound of his swiftly moving wings as he darts back and forth from flower to flower. How interesting he looks as he balances himself on a slender twig to rest and arrange his feathers! How his brilliant coat glistens in the bright sunlight! How eagerly we watch him as he gives a quick *chrrp*, his only note of song, and disappears around some corner, and we wish we could know more about the little stranger! How our

nerves tingle with pleasure, when in our walks, we suddenly discover his nest hidden on a horizontal limb of a tree almost covered with lichens, so nicely arranged that, at first sight you would call it a moss-covered knob! Our cup of joy is full to overflowing, when we find two little white eggs safely hidden in the soft downy nest. When we have safely transferred them to our cabinet, then, only then is our happiness complete. In Mass. this bird usually commences to build his nest the last of May on a horizontal limb of some maple, birch, or apple-tree. It is made of a soft, downy substance taken from some plant. It is then covered with lichens to make it look like a part of the limb, thus showing a wise instinct of self-preservation and of its nest and young also. Soon two very small, white, nearly elliptical eggs are laid and then the work of incubation commences. In about ten days the little brood appear, who receive the watchful care of the parent birds till they are able to care for themselves. We have a nest and two eggs in our collection which were found on a low limb of an apple-tree, over-hanging a large brook. We should judge that the nest had been covered with the same mosses and lichens that are found on apple-trees. Last spring, while at my old home in Buckland, Mass., my brother showed me a nest of this species, which he found, while at work in his wood-lot. The nest was half-a-mile from any house, in a timber-lot, near a cross road. It was on a small, slim yellow birch-tree, some twenty feet from the ground, and on a small, slender, horizontal limb about eight feet from the trunk of the tree. The bird was on her nest, and to all appearances incubation had commenced. My brother found the nest, which appeared to be completed the last week in May. I saw the nest and bird on it, June 2, 1890. As we could not get the nest and



eggs without considerable risk and trouble, we did not disturb the mother bird; but it was a pretty sight to see her sitting on her nest, rising and falling with the motion of the light breezes that were playing around her, and not at all disturbed by our presence below. Our earlier impressions were that these birds nested near our dwellings, because they seem to have a preference for cultivated flowers and the natural conclusion was that they would nest near their food supply, but this was an instance to the contrary. My observation goes to show that they prefer trumpet-shaped flowers like the honey-suckle to many of the more showey kinds. The more we study the habits of this bird the more interested we are. The same is true of all the interesting subjects found in Nature's book, which lies open for all to read who may.

ERWIN G. WARD,  
Palmer, Mass.

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#### Ornithologists at Indianapolis.

##### MR. EDITOR:

At this, the thirty ninth meeting of the American Association for the Advancement of Science held here, a sub-section of Ornithology was formed by scientists of this and adjacent states. The ornithologists of the A. A. S. and many outsiders met in response to an invitation and many papers were read, among them articles by Widmann of Mo., Evermann and Butler of Ind., Professor Steere and Dr. Gibbs of Mich.

Mr. Amos W. Butler of Brookville, Ind., was elected president, and the other offices of a regular organization were filled. We will meet again at the next annual meeting and, with the A. A. S., when we hope to add many new members to our young society.

SCOLOPAX.

Indianapolis, Ind., Aug. 24, '90.

#### The Burrowing Owl.

One mile and one-half north of here is what is known as dog town. This is a section of virgin prairie where prairie dogs, rattle snakes, Burrowing Owls and numerous ground birds live. The Burrowing Owl will be our subject. On the fifth day of May we went out collecting. We were well supplied with tools for we thought we would have to dig deep after birds. It is said by many frontiersmen that the snake, owl and dog inhabit the same hole; but of all the owl holes we have explored we have found none.

On arrival at the dog town we were greeted with barks and amused at the frantic efforts of the little dogs to reach their holes. We went some way further in the town when we saw an owl fly out of a hole. On reaching the hole we found it to be a deserted dog hole (a new one having fresh dirt around the mouth of it, which is kept fresh by them scratching in it.) There was dry horse manure and feathers around the hole. We commenced digging and had not gone far before we found some dead mice and moles strewn all along the bottom of the passage. Finally we saw the female sitting in the passage which we thought was the nest. We were both afraid to reach in and get her, so we drew cuts to see which one should. It fell to me and I pulled her out. We could see one egg lying in the passage. Whether she does this to fool collectors we cannot say, possibly not, but think she does. Further in the hole was the nest about two feet in diameter and two or three inches deep, filled with dry horse manure, with ten pure white eggs in it. The passage never runs straight, but angles into the nest. Some may think it quite rare to get a set of these eggs, but we do not. In the pastures out here where you can find a deserted badger or some other burrowing

animal's hole you will find a burrowing owl's nest.

The cry of this bird is at night, and is sort of a mournful noise not unlike the second decedence of coyotte howl.

S. & G.,  
Gibson, Neb.

— ♦ — ♦ —  
After "Gator's" Eggs.

I have a little to say about my success in finding alligator eggs, which I trust will be of interest to the readers of the OOLOGIST.

Last year, with little trouble, I found several alligator's nests containing a great many eggs; but not so this year, early in August, I, in company with Mr. Herman Weislahn, of Apopka, started off with great expectations for eggs. We walked to the places where I found some last year, but nothing but old nests could we find. Now, I shall first give you an idea of an alligator's nest: The alligator tries to find the roughest and most unsurpassable places in a hammock; here she cleans a round place two to four feet in diameter for her nest, having done this, a layer of muck is brought, upon which she lays a layer of eggs, then comes muck and then eggs again, and so on until the eggs are all in the nest and well covered up. The pile is sometimes three feet high.

When going along the shore of a lake you can see whether there is a nest near or not, for the alligator has a very nice path from the water to the nest.

Now, again to the egg hunt. We walked a good many miles, waded through water, got stuck in the mud, scratched by blackberry vines, stung by wasps and came home with nothing but a cold. I shall not hunt for alligator eggs again this year, and hope that others have had better success.

NICHOLAS V. LINDEN,  
Orange Co., Fla.

Notes from Northern Minnesota.

June 18, 1899 My cousin found a nest of the Virginia Rail in a small marsh while we were hunting for the nests of water birds.

The nest, a slight platform of dried reeds hid among the growing reeds, contained seven eggs in various stages of incubation.

June 20. Found a nest of the Bobolink in a dry slough. Nest on the ground, hidden from view by a willow bush about two feet high. Composed of dried grass.

We saw the male Bobolink before we found the nest and so we began to hunt for it. After going a short distance, we scared up the female. It flew close to the ground a short distance and then disappeared in the bushes. The place where it flew up was several feet from the nest. The nest contained four fresh eggs.

June 22. Took a set of four eggs of the Clay-colored Sparrow (*Spizella pallida*.) Nest and eggs similar to those of (*Spizella socialis*).

July 5. A few days ago found two nests of the Black-throated Bunting. Nests composed of fine round grasses and fine dried weed stems, lined with very fine grasses and a few horse-hairs. One nest was on the ground in a clump of grass and the other in a small bush. The former contained young birds and the latter, four fresh, light-blue eggs. I took the eggs and to-day I found a cowbird's egg in the nest out of which I had taken the eggs.

June 22. Found a nest of the Prairie Horned Lark. It contained four of its own eggs and four Cowbird's eggs.

ROLLA P. CURRIE,  
Polk Co., Minn.

— ♦ — ♦ —  
A juvenile monthly presents the following sample of "good rhetoric" in its editorial column, viz.: "What ails the *Tennessee Philatelist*? We haven't saw it since may."

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571.	Clapper Rail	1-12 1.20
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Above sent post-paid with full data for \$2.00. Safe delivery guaranteed. Send for list of other sets.

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To get the best TANNING PROCESS now in use. I have used this process for 20 years and know its merit. Have tanned from a rat skin to a sheep pelt. I will send the process in full for One Dollar in cash or \$1.50 in first-class sets of eggs not in my Collection, by F. H. Lattin's list. Sample of tanning for stamp. First-class sets of eggs to exchange for other sets.

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When dry, the leaves roll and curl, as if dead, and revive again when wet.

It shows off best when one half is in water and the other dry. Splendid for cut flower backgrounds. To the person sending me the largest order, in stamps, in the next 30 days, I will mail free, a large roll of this curiosity. Post-paid at 15, 25, 50 and \$1.00.

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**Osprey Naturalists' Directory.**

This is the most complete work of its kind ever yet published. It embraces all branches of Natural History and contains 1300 names.

Copies will be furnished at 15c each; or, \$1.25 per doz. Names inserted free. Exchange notices 1c a word.

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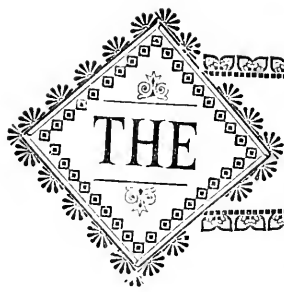
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**COLLECTORS.**

Every one sending 25c (this month) to the "Natural History and Art Store," C. W. Hillman, proprietor, Canisteo, N. Y., will receive one year's subscription to "Maine O. & O." Sea Moss on card size 4 x 6 and my catalogue. And in addition, first-class eggs. To 25th. Yellow-headed Blackbird; to 50th. Rose-breasted Grosbeak; to 100th, a Magpie; to 200th. Red-shouldered Hawk; to 500th, Wild Turkey. Send at once. A grand bargain.

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# OÖLOGIST.



Monthly.

50c. per Year.

Vol. VII,

ALBION, N. Y., NOV., 1890.

No. 11

## Exchanges and Wants.

Brief special announcements. "Wants." "Exchanges" inserted in this department for 25c per 25 words. Notices over 25 words, charged at the rate of one-half cent per word. No notice inserted for less than 25c. Notices which are merely indirect methods of soliciting cash purchasers cannot be admitted to these columns under any circumstances. Terms, cash with order.

I received a large number of good offers from my X. in Sept. OÖLOGIST. I think it was the best investment I ever made. ROBERT A. CAMPBELL, Hanover, N. H.

"I have received 15 letters and cards in one day in answer to my notice in the OÖLOGIST." N. BRADT, Eagle Harbor, N. Y.

"My exchange notice paid me big. Have exchanged about \$100.00 worth of specimens." W. E. SNYDER, Beaver Dam, Wis.



CAUSE.—A single notice or adv. in the OÖLOGIST costing from 25 to 50 cents.

TO EXCHANGE.—160 Eggs; over 50 varieties. Valued at \$15. For best offer of type, locks, lines, etc. GEO. L. THORTON, Box 148, Alma, Mich.

TWO PUEBLO Indian Spears, one Navajo Hand Spears, set of 3 Mountain Plover with data, rare, for best offer of books on Natural History. H. DE F. EARLE, Norwalk, Conn.

I HAVE a collection of Tobacco Tags, 226 different kinds, to exchange for the best collection of Bird Eggs amounting 35, with data, sent me. Address, FRED A. FORSBERG, No. 211 Fifth Ave., Lynchburg, Va.

84 ARROW HEADS, chipped or broken, over 2/3 of Arrow remaining. Value \$1.25. Some are nice Pieces. What have you to offer? DARCY BIGGAR, Fulton, Wis.

TO EXCHANGE.—105 No. Youth's Companions, for anything desirable. What offers? Letters answered, WM. J. THOMPSON, 138 Gloucester St., Ottawa, Canada.

SEVERAL volumes Youth's Companion, in good condition, for books on Ornithology or Taxidermy, or Taxidermists' outfit. What offers? Address with stamp, CHESTER M. WHITNEY, Westminster, Mass.

OVER 1000 duplicate specimens coleoptera Would like to exchange the lot for Birds' Eggs! Will send list. F. HODGE, Hudson, Ohio.

TO EXCHANGE.—A 14-inch, Rubber Tire, Steel Spoke Bicycle, in fair condition, for best offer in eggs, fossils, minerals or curiosities. ARTHUR C. VEATCH, Rockport, Ind.

FOSSILS, Birds' Eggs, Minerals, Curiosities, to exchange for good Books of all kinds. All answered. T. S. HILL, Knoxville, Iowa.

I DESIRE to exchange eggs of Ruddy Shel-drake, Gt. Crested Grebe, Med. Gull, Bobbery Partridge, Kestrel Singles for Hawks, Owls or Warblers' eggs. Send lists and get mine. H. E. KAIGHN, 607 R. I. Ave., Wash., D. C.

EXCHANGE.—15 lbs. of type for best offer of first-class eggs in sets; also imperfect 4ct Play-ingcard stamps to exchange also. 2c certificate blue. ROGER WHINFIELD, 550 Public Ave., Beloit, Wis.

I HAVE a pair of every fine full blood game chickens either to exchange for best offer or for sale. Particulars on application. JOHN HECK, Raleigh, N. C.

TO EXCHANGE.—A \$5 Polyopticon, 200 pic-tures or three good tennis balls, for best egg offer. A chart of fifty tropical birds for Janu-ary to May 1890 OÖLOGISTS. DONALD CAMP-BELL, Cold Spring, Putnam county, N. Y.

TO EXCHANGE.—A Juno Safty Bicycle, in good condition, for a well Bred Bird dog; must be Thoroughly Broken. A Pointer preferred. Write for Particulars. E. B. PECK.

WANTED.—A young Ferret not over twelve months old in exchange for bird skins or cash; also a few eggs in sets for exchange. Quick reply. JESSE Y. CRAVEN, Taxidermist, Box 71, Hulburton, N. Y.

WANTED.—Birds' Eggs, Indian Relics, Con-federate Money and Minerals, for which I will give Minerals, Curiosities and Confederate Money. What am I offered for 25 Star Fish 3 inches in diameter. FRED H. BANKS, Stan-ford, Conn.

TO EXCHANGE.—A live Cooper's Hawk's Stuffed Birds, Minerals, Fossils, Arrow Point-s and over 30 second-class eggs. Will allow two-thirds off regular prices. Will exchange for Minerals, Indian Relics, Stuffed Birds, Skins, first-class eggs in sets or singles, or curio. Make offers. L. V. CASE, Naples, N. Y.

WANTED.—Printing press, type, shot-gun, large cal. rifle, bicycle, show cases, camera or eggs, will give in exchange. Cash, Elgin watch, 22 Flobert rifle, 22 warrnant, 22 peck-t-rifle, 22 revolver, Thread cases, compound micro-scope, eggs or stamps. Cabinets made to order. All letters answered. LETSON BALLIET, Des Moines, Iowa.

## EXCHANGES AND WANTS, Continued.

WANTED.—Eggs in sets of eastern birds in large numbers. Can offer fine sets from the west or birds' skins. JAMES P. BABBITT, 10 Hodges Ave., Taunton, Mass.

COLLECTORS.—I have 1500 eggs in sets; also curiosities, to exchange for eggs, skins, insects, minerals, shells, or curiosities. GEO. A. MORRISON, Fox Lake, Wis.

FIRST-CLASS eggs in sets with data of A. O. U. Nos. 370, 379, 430, 431, 460, 505a, 519, 540b, 563, 629b, 703, 713, to exchange for other sets. Send your lists to WALTER L. RICHARDSON, 435 South Moline Ave., Pasadena, Cal.

TO EXCHANGE.—Weeden Upright Steam Engine, with Village Blacksmith, Base Ball Players, Vol. Youth's Companion, Eggs, Stamps, Coins, for Type and Printer's Material. FRED E. ATWOOD, Chelsea, Vermont.

WILL EXCHANGE a nicely mounted American Bittern for \$5.00 worth of 1st-class eggs in sets with data. Send list. H. C. HIGGINS, Cincinnati, N. Y.

WANTED.—Original sets from other localities, for original sets and singles of Cala. eggs. Please send lists and receive mine. Address, FRED A. SCHNEIDER, College Park, Santa Clara Co., Calif.

WANTED.—Collectors in the North, South and West to collect skins for me this winter. Can use anything for same. Can offer fine eggs in sets or birds' skins. Write for terms. JAMES P. BABBITT, 10 Hodges Ave., Taunton, Mass.

TO EXCHANGE.—1 Weeden Engine, nearly new, 2 Illinois Fossils, for the best offer Western birds' eggs. Address, ROY C. TAPLIN, 2 Spring St., St. Johnsbury, Vt.

LOOK!!—Rare coins and fine minerals for first-class eggs of medium value in sets. Send list stating what you wish. Address, E. F., 466 Franklin St., Norwich, Ct.

EXCHANGE.—The following eggs in sets, A. O. U. Nos. 51a, 71, 106, 201, 333, 488, 511, 613, 721, and others, for sets from other localities. D. N. RAYMOND, Norwalk, Conn.

WANTED TO EXCHANGE.—A good Scovel camera, purchased from the Youth's Companion for the sum of \$9.00, for the best offer of Smith & Wesson revolver, 32 caliber, double action. Must be in good order. Address, H. B. HUSTON, Lakeland, Ky.

BEAUTIFUL Pumps Plumage and other Curiosities, to exchange for bird eggs in sets or ornithological works. H. C. LITTLE, 521 State St., Santa Barbara, Calif.

TO EXCHANGE.—Coins, books, shells, pottery, banjo, Youth's Companion since 1884, relief; great Chicago fire, all or any for Indian relics, Want good axes. Send offers and lists to O. B. MAYES, Lock Box 25, Centralia, Missouri.

TO EXCHANGE.—First-class Birds' Eggs in sets and singles, for other eggs. Send your lists and receive mine. ELMER J. GILLET, Barre Centre, N. Y.

TO EXCHANGE.—Fifty classified European beetles for as many classified American ones, or any other offer in Fossils or Eggs. C. L. HALL, Carpinteria, California.

CAUSTIC POTASH, stamps, banjo, bridges, shells, sheet mica, back numbers of OOLOGIST, printing material, cigarette pictures, tickets, charts, albums, to exchange for eggs. F. LEON ENGLEBERT, Des Moines, Iowa.

TO EXCHANGE.—16 Wild Mexican Pota toes, 5 Starfish. Size 3 in., Singles of (A. O. U.) 501, 495, 652, 540, 412, first-class, for minerals size 1 x 1½ and first-class Birds' Eggs. A. R. HUTCHINSON, Gaines, Orleans Co., N. Y.

WANTED.—Indian and Mound Builders' Relics, for which I will exchange, extra fine, large specimens of Horse Shoe Crab, Crab Shells, Sea-curiosities, Birds' eggs and Foreign Stamps. ROLLIN T. TOMS, Stamford, Conn.

FOR EVERY 10 cents' worth of stamps (none catalogued at less than 5 cents wanted, except with collections) I will give 15 cents' worth of fossils, 1st-class eggs (singles), or fine specimens of copper from the Lake Superior mines. ROBERT A. CAMPBELL, Hanover, N. H.

TO EXCHANGE.—A Quackenbush air rifle, cost \$8, for Coues' Key, Ridgway's Manual, or best offer in books on ornithology, taxidermists' instruments and supplies, camera, guitar. Successful offer answered. G. B. FURNESS, 98 Caroline St., Ogdensburg, N. Y.

WILL EXCHANGE for such species as I need: Fine sets of eggs of Limpkin, Chachalaca, Red-billed Pigeon, White-winged, White-fronted and Mexican Ground Doves, Caracara Eagle, Harris' Hawk, Texas Cardinal, Golden-fronted Woodpecker, Chestnut-bellied Scaled Partridge, etc., etc. THOMAS N. JACKSON, West Chester, Pa.

WANTED.—Coues' "Key" (4th.) Edition; also Ridgway's "Manual of North American Birds." Can offer Eggs of rare Arctic Birds, American White-fronted and Hutchins' Goose, Pacific Black-throated Diver, Rock Ptarmigan, Long-tailed Jaeger, King-Eider; also Skins of the rare Aleutian Song-Sparrow, not to be had in the market. Books must be in good condition. J. W. C. JOHNSON, Signal Corps, Duluth, Minnesota.

GOLDEN EAGLE, set of 2 very handsomely marked, first-class, large eggs, holes size of dime. Will exchange for best offer Job Type; also cuts, borders, etc. Must be in fine condition. Send proofs and make offers. All will be answered. CHAS. TURTON, 114 N. Spring St., Los Angeles, Cal.

WANTED TO EXCHANGE.—Skins and eggs of this locality for other skins. Western skins especially desired. E. E. N. MURPHEY, 14 Telfair St., Augusta, Ga.

TO EXCHANGE.—A fine press, five cases, \$30.00 worth of type and all the tools, for the best offer of eggs or anything. Address, J. W. GLOVER, Marietta, Ga.

TO EXCHANGE.—For best offer before Nov. 25th, 370 stamps, all different, valued at \$6.25 by Scott's catalogue. ERNEST BENNING, 16 Lee St., Cambridgeport, Mass.

TO EXCHANGE.—Eggs and tennis-racquet, for best offer of small steam engine or double-action revolver. Price-list free. Address, A. L. CHILDRRESS, Box 59, Decherd, Tennessee.

GOLDEN EAGLE 1/2 and other desirable sets and singles to exchange, for Type, Self-inking Press, Gums, Revolvers, Type Writers, etc. CHAS. TURTON, 114 N. Spring St., Los Angeles, Calif.



**EXCHANGES.—Continued.**

**TO EXCHANGE.**—The following "Cigarette Picture Albums:" The Ruler Album, The Terrors of America Album, The Yacht Color Album, The Shadow Album, The Governor Album and The Album of the Indian Chiefs, for best offer in eggs in singles or in sets. Singles preferred. In making offers make an offer for each album separate. I will give \$100 in Confederate money for every 75 cents' worth of first-class eggs sent me. Lattin's Hand Book as a basis is both exchanges. E. D. K. COLLETT, 1400 Colorado St., Austin, Texas.

**IOWA BIRDS**, mounted, to exchange for a Cones' Key, latest edition, 1st-class condition. Write for list. I will give \$10.00 worth of the following 1st-class eggs for a copy of above book: 147-6, 152-1, 201-1, 210a-2, 337-1 337b-1, 477-1, 506-1, 604-1, 622a-1, 632-2, nest - 704-3, 761-3. Will trade \$2.00 worth of above for Davie's Key; \$6.00 worth for Sannel's Northern and Eastern Birds; \$8.00 worth for Ridgeway's Nomenclature; all of above eggs, and a pair of finely polished and mounted Buffalo Horns, for a double-barreled breech-loading shot gun, 10 Gauge. Write first. Above Nos. A. O. U. F. LEON ENGLEBERT, Des Moines, Iowa.

**FOR SALE**, cheap, a large collection of minerals, woods, coins, confederate money, insects, shells, bird eggs, curiosities and scientific literature. Will sell all together or separately. Particulars for 2c stamp.

**GEO. B. BENNETT,**  
No. 1123 Main St., Terre Haute, Ind.

**PHOTO** of your future Husband or Wife **FREE!**  
Send Stamp for Postage. **CLIMAX CO. CHICAGO, ILL.**

**FOR SALE OR EXCHANGE.**—"Birds of North America." (New) by Studee. One hundred and nineteen plates giving all the Birds of America. Over seven hundred species. All colored from nature by Theodore Jasper. Elegantly bound in embossed Morocco, with gold-leaf edges. Size 12 x 15. Will sell for \$50 or exchange for \$100 worth of first-class skins of Western Warblers, Thrushes, Vireos, Jays and Wrens, at Catalogue prices. Will exchange for skins. Eggs of Arctic Birds, Emperor Goose, American-White-Fronted and Hutchins, Pacific Diver, King-Eider, Harlequin, Rock Ptarmigan, Long-tailed Jaeger, for Swainson's Warbler, Bachman's Warbler, or Western Warblers. Will give satisfaction for first-class skins. Don't write except you have them. J. W. C. JOHNSON, Signal Corps, Duluth, Minnesota.

**FOR SALE.**—Collection of 77 rare kinds of eggs worth \$30.00, for best cash offer. **WILLIE R. CUMMINGS,** Pacific Grove, Monterey Co., Cal.

**BIG BARGAINS.**

This month at the Natural History and Art Store, C. W. HILLMAN, Proprietor, Canisteo, N. Y.

To introduce my Catalogue of Natural History and Art Specimens and Supplies, I make the following bargains until the 15th of December: For 30c I will send a copy of my Catalogue, and the following first-class small specimens: Starfish, Barnacle, Sea Urchin and an egg each, of the following: Bank Swallow, Housefinch and Lark Sparrow. For 75c I will send a copy of my Catalogue, and the following larger and rarer specimens: Sea Horse and egg of Mediterranean Gull. Send in your orders immediately.

**AN X-MAS OFFER**

We quote the following Liberal Discounts

**UNTIL CHRISTMAS.**

On eggs of the following species: Orders of 50c or over will be sent prepaid, under that amount 5c must be added for postage and packing.

For \$1.00 you can select eggs to the amount of \$1.50.	
" 2.00	" 3.50.
" 3.00	" 6.00.
" 5.00	" 11.25.
" 10.00	" 25.00.

This offer will hold good until Christmas and for single eggs only.

All specimens will be carefully packed in strong tin or wooden boxes and sent at purchaser's risk by mail, or at our risk and purchaser's expense by express.

**SECOND-CLASS SPECIMENS** can be furnished of most species at one-half the price of a first-class one. Parties ordering second-class eggs must name a list of extra eggs to be used as substitutes.

**SETS.** Many of our Patrons want us to include sets in this offer. This we have rarely been able to do, but *this once* will allow them to include sets of the following species, Ridg., Nos.:

673, 679, 686, 690, 693, 694, 695, 696, 705, 711, 712, 611, 585, 579, 580, 546, 558, 561, 480b, 471, 469, 464, 440, 408, 387, 378, 372, 373, 375, 337, 324, 325a, 289, 282, 281, 263, 270, 272, 181, 182, 170, 189, 204a, 207, 228a, 240b, 242, 243, 231b, 233, 244, 245, 161, 157, 11, 12, 13, 13a, 16, 67, 63, 1, 7, 22, 137, 214, 251, 315, 334.

Holboell's Grebe.....	\$ 50	Caspian Tern.....	50	Brandt's Cormorant.....	50
Horned Grebe.....	25	Cabot's Tern.....	40	Baird's Cormorant.....	50
American Eared Grebe.....	25	Forster's Tern.....	15	Brown Pelican.....	25
Pied-billed Grebe.....	10	Common Tern.....	10	Merganser.....	1 00
Puffin.....	25	Arctic Tern.....	15	Florida Duck.....	2 00
Murre.....	25	Least Tern.....	08	Blue-winged Teal.....	25
Razor-billed Auk.....	25	Sooty Tern.....	35	American Golden-eye.....	75
Glaucous Gull.....	85	Black Tern.....	12	Barrow's Golden-eye.....	1 00
Iceland Gull.....	1 50	Noddy.....	75	American Eider.....	25
Great Black-backed Gull.....	50	Black Skimmer.....	12	American Scoter.....	2 00
American Herring Gull.....	25	Fulmar.....	75	Ruddy Duck.....	50
Ring-billed Gull.....	30	Manx Shearwater.....	1 00	Scaup Duck.....	75
Mew Gull.....	35	Audubon's Shearwater.....	2 00	Velvet Scoter.....	1 00
Laughing Gull.....	20	Cormorant.....	50	American Flamingo.....	1 00
Franklin's Gull.....	75	Double-crested Cormorant.....	35	American Bittern.....	1 25
Gull-billed Tern.....	15	Florida Cormorant.....	25		

Least Bittern.....	50	Prairie Horned Lark.....	20	Yellow Warbler.....	05
Great Blue Heron.....	50	Ruddy Horned Lark.....	35	Chestnut-sided Warbler.....	20
Louisiana Heron.....	15	American Magpie.....	25	Maryland Yellow-throat.....	15
Yellow-cro'ed Night Heron	25	Blue Jay.....	05	Yellow-breasted Chat.....	10
Limpkin.....	1 25	American Crow.....	05	American Redstart.....	15
Sora.....	10	Florida Crow.....	50	Mockingbird.....	05
Florida Gallinule.....	12	Cowbird.....	03	Catbird.....	02
American Coot.....	10	Dwarf Cowbird.....	20	Brown Thrasher.....	03
Red Phalarope.....	1 00	Yellow-headed Blackbird.....	05	Texas Thrasher.....	30
Northern Phalarope.....	50	Red-winged Blackbird.....	02	Curve-billed Thrasher.....	25
Black-tailed Godwit.....	50	Meadowlark.....	12	Californian Thrasher.....	25
Long-billed Curlew.....	75	Western Meadowlark.....	12	Carolina Wren.....	15
Whimbrel.....	40	Hooded Oriole.....	50	Bewick's Wren.....	50
Bob-white.....	10	Orchard Oriole.....	10	Vigor's Wren.....	25
Florida Bob-white.....	15	Baltimore Oriole.....	10	Baird's Wren.....	25
Texan Bob-white.....	10	Bullock's Oriole.....	15	House Wren.....	06
Willow Ptarmigan.....	75	Brewer's Blackbird.....	05	Western House Wren.....	06
Prairie Hen.....	20	Bronzed Grackle.....	05	Long-billed Marsh Wren.....	06
Wild Turkey.....	75	House Finch.....	06	Brown-headed Nuthatch.....	35
Chachalaca.....	1 50	American Goldfinch.....	08	Tufted Titmouse.....	35
Sooty Grouse.....	1 75	Arkansas Goldfinch.....	20	Chickadee.....	12
Mourning Dove.....	03	Chestn't-collared Lo'g'sp'r	75	Wood Thrush.....	06
White-winged Dove.....	30	Grass Finch.....	02	American Robin.....	02
Ground Dove.....	25	Lark Sparrow.....	05	Red-spotted Bluethroat.....	60
Cooper's Hawk.....	30	W. Lark Sparrow.....	05	Bluebird.....	02
Harris' Hawk.....	75	Gambel's Sparrow.....	25	English Sparrow.....	02
Red-tailed Hawk.....	60	Chipping Sparrow.....	02		
Red-shouldered Hawk.....	50	Field Sparrow.....	04		
Fla. Red-shouldered Hawk	1 25	Song Sparrow.....	02		
Short-eared Owl.....	1 25	Heermann's Song Sparrow	11		
Hawk Owl.....	1 00	Swamp Sparrow.....	52		
Burrowing Owl.....	25	Towhee.....	01		
Yellow-billed Cuckoo.....	10	Spurred Towhee.....	25		
Belted Kingfisher.....	20	Californian Towhee.....	08		
Downy Woodpecker.....	20	Cardinal.....	05		
Red-headed Woodpecker.....	08	Texan Cardinal.....	50		
Red-bellied Woodpecker.....	30	Rose-breasted Grosbeak.....	15		
Golden-fronted.....	75	Black-headed Grosbeak.....	20		
Flicker.....	03	Indigo Bunting.....	08		
Red-shafted Flicker.....	10	Painted Bunting.....	10		
Nighthawk.....	40	Black-throated Bunting.....	05		
Western Nighthawk.....	50	Scarlet Tanager.....	25		
Chimney Swift.....	15	Summer Tanager.....	20		
Costa's Hummingbird.....	1 00	Purple Martin.....	15		
Scissor-tailed Flycatcher.....	10	Cliff Swallow.....	04		
Kingbird.....	03	Barn Swallow.....	05		
Arkansas Kingbird.....	08	Bank Swallow.....	04		
Crested Flycatcher.....	12	Loggerhead Shrike.....	08		
Phoebe.....	05	White-rumped Shrike.....	15		
Wood Pewee.....	15	California Shrike.....	08		
Acadian Flycatcher.....	20	White-eyed Vireo.....	20		
Trail's Flycatcher.....	20	Bell's Vireo.....	15		
				<b>FOREIGN EGGS.</b>	
				Emu.....(end blown).....	2 00
				Rhea.....".....	3 50
				Barbary Partridge.....	20
				Mediterranean Gull.....	25
				Sheldrake.....	25
				Swan.....	2 50
				Lesser Spotted Eagle.....	3 00
				Lesser Kestrel.....	25
				Great Crested Grebe.....	25
				Egyptian Goose.....	1 25
				<b>NOVELTIES.</b>	
				Alligator.....	20
				Turtle.....	10
				Python.....	1 00
				Shark.....	15
				Hammerhead or Leopard	
				Shark.....	15
				Egg of Skate.....	05
				Devilfish.....	15
				Egg Case of Periwinkle.....	20
				12 Pharaoh's Serpents'	
				Eggs.....	10

Address, FRANK H. LATTIN, Albion, N. Y.

## OLIVER DAVIE'S NEW WORK ON TAXIDERMV.

See Description on page 94, 95 and 96 May number of THE OOLOGIST.

This work will be published only on condition that there are 500 subscribers; also, only that number will be taken. If the requisite number are obtained the name of each will be published in the work. Write at once for subscription blank, proof pages of the illustrations and for full particulars address

**OLIVER DAVIE, 214 W. High Street, COLUMBUS, OHIO.**

\*.\* To any reader of the OOLOGIST, who will write Mr. Davie for a blank and properly fill the same, stating to him that they subscribe for his work, through the recommendation of the publisher of the OOLOGIST, we will, if you are not more than pleased with the work when published, give you \$5.00 in cash for your copy and present you with a years subscription to the OOLOGIST, for your trouble.

# THE OOLOGIST.

VOL. VII.

ALBION N. Y., NOV, 1890.

No. 11

## Faries in a Fary land.

### THE RUBY-THROATED HUMMINGBIRD.

In the eastern U. S., there is, perhaps, no bird which is so generally admired by all and bears such an unmistakable identity as the Ruby-throated Hummingbird. Common throughout its range, it is always a welcome wonder of untiring beauty in the sight of man, visiting the gardens and even entering the houses to sip a tiny drop from the gayest flowers. And yet, its minute size and lightening-like flight render it difficult to get acquainted with.

Of a family of several hundred species, (all American) the Ruby-throat is the only one known to occur east of the Mississippi River. It is *our* smallest and fairy of birds, while in the Tropics there are even smaller Hummers, and others, whose spread of wing equals that of the Robin. Others still, have bills longer than their bodies, others with bills curved into a quarter circle, and many with puffs and frills, and long streaming tail feathers. All wear gorgeous colors, and while many are adorned in various shades of the most brilliant and iridescent hues, which dazzle the eye, ours is one of the plainest, but prettiest.

Though not tame, the Ruby-throat is little suspecting of danger, and will sometimes take honey from flowers held in the hand. Why should they be wild, when they have no enemies, except now and then a cruel cat (which has learned to hide 'mongst the flowers in the garden to catch them) and man?

This little creature is well deserving of attention, for no species of the feathered tribe furnishes a better or more interesting field for study and observation.

Watch it as it goes about, moving with jerks from flower to flower, always flying when it takes its food, and always humming too.

One would think so small and gay a bird knew no care but joy, but follow the collector into the woods and see how these tiny beings are left without houses, for the sake of knowledge.

A few years ago, the eggs of this, the commonest of the Hummingbirds, were known only to a favored few, but, through study and investigation, they are now in the reach of amateur. It was only in 1886 that I could not buy a nest (which was accidentally found) for five dollars. Now, I would be glad to realize the one-tenth that.

It was in this same year that I saved my \$5.00 by finding one myself. In passing along the road I had seen the female busily engaged among the bluegrass tops in a woods pasture. She would fly away and return, but any efforts to learn her mission or discover her nest were futile. Just one week later, I rambled through the woods, when lo, I heard her fly from overhead. I stood as still as a statue for some fifteen minutes. Presently she returned and after reconnoitering awhile, to my great delight, she went to her nest. I watched her till my neck was sore and then hurried home to tell the news. Next day, accompanied by my father, I returned with collecting can, a long ladder and ropes for guys. The ladder was up-ended under the nest. With one guy tied to a tree and the other held by my father, I ascended to "the prettiest of them all," and was overjoyed to find two fine eggs in it. I now understand her errand in the bluegrass. She was gathering spider webs which served as nails in her house to fasten it together.

The nest was not 100 yards from the bluegrass, and her line of flight pointed directly to it.

She placed the nest on a drooping limb of a small beech tree, I placed it in my collection, which was awarded the premiums at the County Fairs.

The next year I found three nests, all on beech trees not 50 yards apart, and in plain view of each other. Two were on the same tree and within ten feet of each other; one, an old one. The bird was carrying material from this old nest to the limb spoken of, (ten feet away) when I discovered her. The new nest was only begun and not visible. Eight days latter I took nests and eggs, though the old nest was half used up. Three weeks latter I found this third nest, which contained highly incubated eggs, and strange as it may seem, this tree also sported a nest of the Acadian Flycatcher, containing four eggs, one of the Cowbird.

In the spring of 1888 I came to Ark., and being little acquainted with the bird, I knew not where to seek for nests, there being no beech trees. All was hill and hollow, clothed in wild timber, the beech being replaced by black oak, post oak and sweet gum. The birds are much more numerous here, however, and I knew that by diligence I could solve the problem.

While making pine boards for shingles one day in July, I was awarded by seeing a bird fly into a small black oak. The nest was soon found with two newly hatched young. This was as great a find as my first, for, I thought I had not only learned where to find them here, but had discovered the kind of tree most preferred. During the balance of that summer and the next I searched in vain for more. I traced birds up hundreds of times, only to find them occupied in sucking a sweet succulent juice which oozes from knots or injured places in the bark of the black and red oaks. This, they are very fond

of, and I think, subsist largely on it during the dry hot months when there are fewest flowers. The cause of this instance I know not. Insects also visit these parts, and the wasps give the birds much trouble. Several birds visit the same trees, going constantly from one to another.

On June 16, 1890, while going up a steep hillside, my attention was attracted by a bird overhead. In less than five minutes, the female, which I had scared away, returned and alighted in her nest which was in the fork of a white oak limb, twenty feet above the road. This bird was particularly wild, for at every stir of the feet she flew away, and each time she returned, instead of lighting on the edge of the nest first, she would dab down into it, with as much ease as she could light on a limb. I secured the eggs a few days later by my ladder process.

On the 18th, while watering my horse in a little stream, I heard a bird behind me, and on looking around saw a bird dart away from her nest a few feet and return, as if either catching or driving away insects. These operations were repeated without the slightest notice of my presence. She even remained on her nest while I climbed the tree, (a small red oak four inches in diameter) took another short excursion, giving me an excellent opportunity to view the eggs, then returned and remained till I had cut the small limb nearly in two, and lowered it upon another branch, when she flew to an adjoining tree. The nest was twelve feet high.

The 19th, was another "lucky day" for me. While strolling on the river bank, I chanced to see a bird in a small sweet gum tree. She soon found her nest, which was on a drooping limb ten feet from the ground, and overhanging the water. Finding the complement to be complete, the limb was cut partly off near the body, and weighted down in reach from below.

On going down, I found the eggs

fresh, and the prettiest and most delicately colored nest it has ever been my lot to see. The architecture was particularly fine, and the body, instead of being made of the usual brown vegetable down, was almost of a lemon-yellow color, and perhaps collected from the under side of sycamore leaves. Then, to add to the beauty of the scene, the tree was one that was particularly corky. What a beautiful view this would have made for Mr. Cheney's camera! I suppose every naturalist dreams of finding. My turn came this night (the 19th); I dreamed of finding a nest back in Indiana. Next morning I was surprised that my dream was partly true. I found my fourth nest within a week. Such as this is almost enough to make an amateur dream. This nest was in a small white oak, 20 feet up, and contained two nearly hatched eggs. The female stayed in sight while collecting.

My next find was on the 27th. While out hunting, I found a deserted nest, high up in a large black oak, and without anything to assist me. I took a friend out to see if he could find it; showed him the tree, and finally the limb it was on before he could see it.

This, I concluded, was the last of the season, though, on the 23rd of July, I collected a set of two fresh eggs, half way down the Mt. (500 feet). While walking to town I saw this bird busily engaged about a small black hickory, my curiosity was aroused, to know what she could be doing there. She had some brown object in her bill, and I was determined to see what she did with it. Presently, she surprised me by alighting on her nest in that same tree, and not ten feet over my head. After remaining quiet a minute or so, moving her head from side to side as if watching me, she proceeded to place the brown object inside the nest, then "worked" it awhile and flew away. I climbed the tree first to see how large

the birds were, and was again surprised to see two white eggs. I gave her a day or two to finish her nest and then took the whole. The nest was placed on a little, crooked branch of a limb that hung vertical for several feet, and was in half an inch of main limb. This female also stayed close by to see her nest taken, and I once saw the male. She was the second Hummer I ever saw with anything in her bill. The other was carrying a long mass of spider webs, and how she flew so swiftly without becoming entangled, was a mystery.

I am told, on good authority, that a Hummer once built in a honeysuckle in a man's yard, but I think the nest was some other kind, and as the Hummers were seen there so often, they were mistaken for the owners. But few who have not seen these nests can have any idea of what a Hummingbird's nest is like. I used to hunt for them in honeysuckles.

It is probably true that the young are fed by regurgitation, and by careful study we may know in another year. No Hummingbird lays more than two eggs in one nest, and all are white. The eggs are the smallest of all, and yet one egg is one-sixth as large as the bird's body. The eggs, like those of a few other birds that only lay in pairs, are "male and female," that is, each set contains an embryo male and female. (In the case of the Carrion Crow, the eggs are of different size, shape and markings.) Two sets of young are often reared.

In heading this article as I have, I do not mean to infer that Ark. is a fairy land, nor this mountain, but that a particular place on the mountain is just such a place as is often ascribed to those mythical beings, the fairies. On entering it, a strangeness takes possession of one, that makes him feel as if there is a little truth in fairy tales after all. It is the head of a Mt. stream, walled in by gray checked rocks,

clothed in mantles of moss and ferns, bedecked with blooming flowers and grasses in summer, o'erhung with gigantic crystals of ice in winter, and almost closed in by luxuriant vines and vegetation throughout the year. To add to this beautiful scene, the silence is broken by the fall of water, dripping here and pouring there, falling on the metallic fragments of rock like so many little "Brownies" ringing bells.

One only has to sit a few moments, or perchance he is taking a bathe, when he finds he has company in the form of little Ruby-throated fairies. Their mission also, is to bathe, and their manners are particularly interesting. The first you know of one's presence is the hum of wings, resounded by the semi-circular walls, intermingled with the sound of trickling water. In the obscure light, one is at a loss to know where it is, 'til he has scanned the whole scene over, and finds it perhaps, in a few feet of him, poised under a little stream of water, or, half flying and half sitting on a bunch of sprayed moss on the opposite side. This is a sounding bell, so to speak, for one can't tell where they are nor how near, unless he sees them. A bird will come in and view the whole structure before bathing, and then will try many sprays before finding one to suit. In taking this sprinkle, the body is poised upright, with the bill verticle, turning from side to side. One dip is never enough, but it repeatedly retires to a dead limb to ruffle and plume, and darts away as suddenly as it came; to return, perhaps, the next day. I have seen several here at a time, and all falls on the Mt. are more or less frequented, but this is the favorite place. Of course they do not get under the largest streams, but where it is actually streaming, and so hard, too, that I can hardly bear it, as it falls 35 feet or more. Where these falls cannot be had access to, they bathe in the tree

tops, in the morning dews and after showers.

"ARKANSAW HOOSIER,"  
Clinton, Ark.

#### Notes from Travis Co., Texas.

The following taken from my notebook, are some of the birds found breeding here during the early months of the breeding season, of this year (1890).

The first nest found on March 4th, was that of the American Crow, containing five fresh eggs. It was situated in a cedar tree twenty feet up. Also found a nest of the Black Vulture, containing two fresh eggs. Eggs laid on the bare rock of a cliff ten feet up.

March 8th. Nest of Black Vulture containing one egg, incubation advanced. Nest in a small cave, four feet below entrance.

March 2nd. Nest of Great Horned Owl, containing three young about a week old. They were covered with white down all over, with large round eyes and a long hooked bill. All taken together, made them quite pretty.

March 20th. Found nest of Texan Screech Owl, three eggs slightly incubated, eggs laid on bits of rotten wood at bottom of a cavity in the decayed trunk of a tree.

March 23rd. American Barn Owl, two eggs incubation advanced; eggs laid at end of burrow in a bank, no attempt at a nest having been made.

March 29th. Two eggs of Black Vulture, incubation begun; eggs laid on bare rock in cavity of a cliff twenty feet up.

March 29th. Bluebird, five fresh eggs. Nest in the deserted nest of Woodpecker, in telephone pole fifteen feet up, composed of grass, etc.

April 3rd. Black-crested Titmouse, five fresh eggs; nest in natural cavity of China tree, not far from my window, composed of cotton, wool, paper, feathers and other soft materials.

April 3rd. Dotted Canon Wren, four fresh eggs. Nest in the roof of old stable, composed of straws, etc., lined with cotton and spider webs, making a very soft affair.

April 4th. Carolina Wren, four eggs incubation begun; nest placed between logs of an old house four feet from floor, composed of sticks, leaves, feathers, etc., lined with hair.

April 4th. Texas Screech Owl, two eggs incubation slight; nest in natural cavity of live oak tree twenty feet up.

Same date, five fresh eggs of Plumbeous' Chickadee; nest in telephone pole fifteen feet from the ground, composed of cotton, feathers.

April 6th. Baird's Wren, six fresh eggs; nest in that of Woodpecker in telephone pole six feet from the ground, composed of sticks, grass, etc., lined with hair.

April 11th. Dotted Canon Wren, four eggs slightly incubated; nest in crevice of rock, composed of sticks, grass, etc., woven together with spider webs, lined with cotten.

April 11th. Four fresh eggs of Phoebe; nest one side of cliff four feet up.

May 4th. Blue grey Gnatcatcher, four fresh eggs; nest placed in the forks of tree six feet up, composed of fine grass, spider web, covered with lichens.

May 18th. Blue Grosbeak, four fresh eggs; nest placed in low bush four feet up, composed of bark, paper, pepper-bush, etc., lined with fine roots.

Same date, Yellow-breasted Chat, three fresh eggs; nest placed in a clump of briars near the ground, composed of coarse straws, inner bark of trees, lined with fine roots. This is the first nest known by the writer from Travis county. The bird is more common this season than ever before. Two nests containing young have been found since.

May 30th. Baird's Wren, six eggs fresh; nest placed in a wall basket which hung near a window in one room of my house.

The bird must have been in a great hurry to lay, for they both worked all day carrying in straws, feathers, etc. Within four days the nest was completed, and on May 20th, one egg was laid and so on until six eggs were laid. The female resumed the task of incubation and I took the eggs.

E. K. GREEN,  
Austin, Tex.

#### A Walk to Mt. Hamilton.

On May 15, 1890, my brother and I started to visit a friend, who lives on Mt. Day, a point about eight miles from Mt. Hamilton, where the famous Lick Observatory is situated. We walked almost 20 miles and had just gone round a sudden bend in the road when I spied a Yellow-billed Magpie's nest. It was about thirty feet from the ground in a large oak tree. I climbed up to it and found six badly incubated eggs. They looked like large Shrike eggs. When we started on again the hills seemed to be very steep, and we went up and up till at last we reached our friend's cabin. The owner of the cabin is an old bachelor, who is living on a quarter section of land which he has pre-empted. We spent the night with him and did not get up very early next morning and were still tired. I went outside as soon as I had eaten a little breakfast, and sat on a log and watched some blue birds which were making a lively racket in a tree near by. They seemed to be in a great deal of trouble about something, so I climbed up the tree and found they were fighting a Nuthatch.

There was a hole in the side of the tree, too small for my hand to get in, so I called to my brother to get a hatchet and come up. He cut into the hole till he could get his hand in. The nest was about eight or nine inches down and in it were eight Nuthatch eggs. In blowing them one disap-

peared, no one knows how. On our way home the next day I found another nest, but not having a hatchet we could not cut into the hole. But I hope to go that way again some day, as I find these eggs trade well. We had left our friend's house about 9 a. m. and walked about 35 miles and climbed about eight trees and reached home at 7 p. m.

GEORGE D. CHAMBERLIN,  
College Park, Santa Clara Co., Cala.

Great Horned Owl.  
(*Bubo virginianus*).

During my sojourn in Southern Missouri last winter and spring I gained some points in regard to the incubation of the Great Horned Owl (*Bubo virginianus*), which may prove interesting to the readers of the OOLOGIST.

On page 504 of "Coues' Key to N. A. Birds." may be found the following:

"Eggs said to be three to six, but not known to me to be more than two in number." Let me here quote from my note book. "March 12, 1890. Nest of Great Horned Owl (*B. virginianus*) in top of a large stump some eighteen or twenty feet from the ground. Nest composed of sticks, leaves, down, etc. Contents, four white spherical eggs, about 2.26 x 1.90 inches. Shot parent bird, length 23 inches extent 52 inches." Here is a case of four eggs.

I will again quote from my note book. "April 4, 1890. Nest of Great Horned Owl (*B. virginianus*) Contents, three young Owls, evidently two weeks old at least." One of these young Owls I kept in captivity for some time, it learned to fly in about two weeks. This case not only shows that there were more than two eggs, but also that the eggs were laid quite early, allowing the nestlings to be two weeks old and as the incubation occupies three weeks, it is clear that the eggs were laid about Feb. 27th.

One more quotation from the note, which I think records quite an early

incubation. "April 14, 1890, shot three of the young of the Great Horned Owl (*B. virginianus*) averaging about 22 inches in length and 45 in extent." All of these birds could fly, almost perfectly and were without doubt, six weeks old, and allowing the three weeks for incubation shows that the first eggs must have been laid about Feb. 10th. This is about the earliest case of which I have heard.

Now it is my opinion that it is more common to find more than two eggs than it is to find that number of less in the nest of the Owl in question. I also remember in the spring of 1889, I don't remember the exact date, the female Owl of the above species kept in captivity at Washington Park, Chicago, laid four eggs on the bottom of the cage. These eggs were given to me by keeper Dessette and are now in my possession.

J. M. DOBSON.

Another Instance of Strange Co-habitation.

MOURNING DOVE AND FLYCATCHER.

While glancing over the columns of the August number of THE OOLOGIST, I noticed an article of peculiar interest under a similar heading, and, recalling an experience of like nature which came under my observation a few years ago, I have concluded to contribute it to the gleanings of nature for what it may be worth.

During the last of May, when out on business of another nature, I chanced to be driving along a road hemmed in on both sides by a hedge fence of Osage Orange, with here and there an occasional stalk of the same kind, which had not been pruned but had been allowed to outgrow the others in height, thus making a shade tree as is the custom of doing in this country. Suddenly I was impressed by the well-known cry of the Scissor-tailed Flycatcher and, upon looking in the direction of the sound, I



saw a pair of these *tyrannidæ* flying above and toward a point ahead of me. Finally the female alighted on top of one of the tall Osage Orange trees, on an overhanging branch of which was placed the nest. The female, after flying to and fro near its mate uttering cries of alarm as if to secure her my protection, finally alighted on a more distant tree. After a hard climb of but a few minutes, I was safely on the limb beside the nest; but what was my surprise to find, not a complete set of one species, but one egg of a Mourning Dove and two eggs of the Scissor-tailed Flycatcher. The latter I left, but the former I carried with me and placed in a nest of its own species. In a few days (June 4, 1888) I made it a point to visit the Flycatcher's nest again. This time I found a fine set of five eggs of the Scissor-tailed Flycatcher with incubation just begun, and, as they lie before me, measure respectively .93 x .70, 1.00 x .68, .94 x .70, .95 x .71 and .93 x .68. The nest was composed of weeds and rootlets, and lined with hair, cloth and woolly fibers, and measured as follows: Diameter, outside  $4\frac{1}{2}$  in., inside 3 in.; depth, outside  $4\frac{1}{2}$  in., inside  $2\frac{3}{4}$  in. The composition of nest plainly shows it to have been built by the Flycatcher, and I have come to the conclusion, that the Mourning Dove must have deposited its egg when the Flycatchers were out foraging, as it would have been a very impolite as well as a very unsafe thing to have done, had the Flycatchers been at home. I have never heard of such a daring deed being done by such a meek bird as a Dove, but the evidence certainly goes to prove such. The measurements of the Flycatcher's eggs are larger than the measurements given in the various works on oology, but, having a good view of the parent bird, I am sure that my identification is correct. Let us hear from others.

W. MORGAN MARTIN,  
Wellington, Kansas.

[Friend M's. "Scissor-tail" would if captured have proven an Arkansas Kingbird.—Ed.]

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#### In the Maine Woods.

I passed the greater part of last May and June in Maine woods and made, to me, some very interesting discoveries. I found two sets of Magnolia Warbler's eggs, one of two eggs, the other of three, both much incubated. According to Davie's book these are very small sets.

In the bottom of the former nest was a Cowbird's fresh egg buried. There seemed to be only one nest, but the bottom was sufficiently thick to cover both sides of the egg, and I should not have found it had I not been in the habit of collecting the nests with the eggs. I have read of such cases, but this is the first one that ever came to my notice. Are such cases common? [Not uncommon.—Ed.]

I have several specimens of the Shrike that nests in Maine, together with the eggs, but I am unable to tell which one of the Shrikes it is from Cones' descriptions. Will you please inform me? [White-rumped.—Ed.]

I found that the Slate-colored Junco and the Winter Wren rear their young as far south as Orient, Me., and in a very level country.

A. B. CALL.

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#### An Ornithological Leech.

A companion and myself while on a collecting trip during the past season, found a nest of the House Finch situated about five feet from the ground in the lower branch of a live oak. On approaching the nest we were surprised to find the bird sitting thereon, asleep, as we at first supposed, but further examination revealed life to be extinct. Removing her from the nest we made a *post mortem* examination and found

a large leech fastened tightly to the throat. The bird was still warm and as it was about 9 A. M. when we found it, my surmises are that the insect attached itself to the bird during the night when the latter was asleep. Death must have been instaneous, as there was no sign of a struggle. The nest contained three fresh eggs.

EUREKA,  
Los Angeles, Cal.

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#### Brewer's Blackbird.

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This bird is one of the blackest I know, and when resting emits a harsh, shrill sound which is none too pleasant. The bird itself is a coal-black from bill to tail, and its egg is in strict keeping with it. The egg has a light background with lightning flashes and blotches of dark brown evenly distributed over its surface. The number in a set ranges from four to nine, while most of the sets contain five or six eggs. The nests are large and composed of different weeds, with a thick lining of black horse hair, and present a striking resemblance to each other. They are generally placed in either pine or cypress and are often found in the weeping willow. Very often two and three nests are found in the same tree and are always faithfully guarded over by their respective owners.

The bird is common in this locality, and a number of them are shot every year for mere sport.

Out of nine sets which I collected this year I found none incubated. They were all collected within a few days and showed very even markings.

The Blackbird makes a great noise when disturbed in her nest and I have known them to flap their wings in the intruder's face. They stay near their nest and utter sharp cries until the marauder is out of sight.

One day in the latter part of May I had climbed a tall pine and was just possessing myself of a nest containing

seven large eggs, when the owner came dashing by, emitting the Blackbird's peculiar cry. It was so sudden a surprise that I dropped the box containing the eggs to the ground. I descended hurriedly, my heart still beating loudly, and found the eggs spattered over the trunk of the tree and the ground below.

Although it is not a common thing, I have seen this saucy bird try more than one cherry on our place and they make an indignant protest against being stopped.

HOWARD W. BELL,  
San Jose, Cal.

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#### A Cowbird's Nest and Eggs (?)

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Three years ago this summer while hunting for eggs, I had a singular experience.

While advancing into a thicket, I discovered a nest made of very coarse straws placed about four feet from the ground in a small maple bush. The bird on the nest was certainly a Cowbird, and the eggs were certainly the eggs of that species. There were five eggs in all.

I would like to know if any other collectors ever had any such experience.

A. L. THORNE,  
Newark, N. Y.

[Mr. T.'s nest was doubtless that of some other species receiving a viits from a cowbird.—ED.]

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#### Was it the First Set?

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I notice that in W. De. La. Barre's article in August number, he speaks of a set of King Rail's eggs as the first recorded set in Minnesota.

This may be the first *recorded* set; but in 1886, eggs from two sets came to my notice collected in the vicinity of Minneapolis, Minn., a specimen of one of which is now in my possession.

I also have information of a speci-

men taken in this locality a year or two before this.

H. M. GUILFORD,  
Minneapolis, Minn.

COLORADO SPRINGS, Colorado,  
Aug. 10, 1890.

EDITOR OOLOGIST:

In looking over the August OOLOGIST, I noticed an article on the King Rail from Minnesota. Being a former resident of that state, I am naturally interested, but our friend De la Barre prizes his set of eggs of this species rather too highly.

Although rare, quite a number of sets have been taken in the vicinity of Minneapolis. I have found two nests of egg-broken shells myself, and shot half a dozen or more of the birds in the fall of the year. Yours,

GEO. G. CANTWELL.

#### An Egg Within Two Eggs.

About this time last year I found an egg of *Galbus domesticus* which was so very peculiarly shaped that I thought I would blow it and place it amongst my curiosities in eggs. It was about two inches long and the largest end an inch in diameter, the smallest end about  $\frac{1}{4}$  of an inch curved like a gourd. Upon drilling through the shell the drill struck upon an inner shell which quite surprised me and upon removing the contents of egg No. 1, egg No. 2 would rattle within it. I wanted to see the inside egg so I cracked egg No. 1 around the middle and removed No. 2. It resembled No. 1 in shape, but was much smaller. I thought I would drill this egg to see if it contained anything, when lo! behold! this egg contained another shell about the size of a grape or large pea.

This made three eggs, one inside the other, each contained the albumen (the white) common in eggs, but no yolk. This I think outrivals A. O. G.'s egg, of Lawrence, Kas. Let us have the ex-

perience of other collectors in this line.

JOS. P. JACKSON,  
Kelfon, Pa.

#### Who Will Answer These Queries?

J. C. G., Montgomery, O., wants to know if a Crow can talk if its tongue is not split.

W. A. D., Scroggsfield, O.—“I saw a bird the other day which was the size and shape of a Blue Jay. It flew like a Jay and was of the same color, as near as I could judge, except its tail which was brown, precisely the color of a Brown Thrush. I had a good view of it. What was it?”

H. G., Montclair, N. J.—“What kind of a bird is it that lays an egg that is very light bluish-white, blotched with light brown all over? Nest like that of Grackle, in a large hemlock tree. Eggs, five and about the size of a Blue Jay.”  
[Send us an egg and we'll tell you.—ED.]

R. M. F., Sioux City, Ia., wants to know what small bird it is, which inhabits New England and, in seed-time, follows the sower, uttering notes which sound like: “Sow; sow your wheat, sibley, sibley, sibley.”

#### Nesting of *Contopus borealis* at Westbrook, Me.

The Olive-sided Flycatcher is rare here and is generally considered a migrant only. On the 9th of June, 1890, as I walked through a pasture I was pleased to note one of these birds in a small clump of hemlocks. The next morning I was out by daylight and was agreeably surprised to note it in the same place. I quickly forded the small river and was about ready to shoot the bird when a second made her appearance, and from the proceedings I was quite sure that they were about to breed, and so left the place as quietly as possible.

The locality was a dry pasture through which ran a little river in an easterly course; on the north side a

bank of clay rose from a step of ground, abruptly to a height of 60 or 80 feet and then sloped away to the northward. About one hundred yards to the northwest was the remains of a once heavy pine growth. On the back grows a clump of hemlocks and several scattered hemlocks and spruces. These trees were low but quite dense.

On the evening of June 23 I thought it time to look for the nest. As I reached the scene of action, the solemn tri-syllabled note of *C. borealis* reached my ear, but the singer was not to be seen. I ascended several trees and had looked through the clump of hemlocks without success, and as a last resort. I gathered several clubs and dashed them noisily into the trees. At last a robin, which had gone to roost for the night, was frightened so badly by the clatter that she dashed across the river in full cry, and so started the female *borealis* from her nest and she quickly summoned her mate.

He looked on for a few minutes, and as all became quiet he retired to a dead limb of a large pine tree and as the female became quiet, disappeared into the woods. The female was routed from her nest again and the tree ascended.

The nest was on a horizontal limb of lone spruce about twenty feet from the ground and out about four feet from the trunk of the tree. The foliage was very dense, and the nest could not be seen from the ground. It was composed of spruce and hemlock twigs with much of the hanging moss which grows on these trees. This moss composed the lining together with a very little straw. It was a flat, shallow, and on the whole a rather frail structure, situated on a part of the limb where the foliage was densest. The diameter, outside, was 5 x 4.50 inches; inside, 2.75 x 2.50. Depth, outside, 2; inside 1 inch.

The eggs were three in number, of a light cream color, with spots and

blotches of rich reddish-brown and purplish-brown, inclined to a wreath at the large end. Two of them measured .79 x .61 and .79 x .59 inches respectively. They were quite round and blunt, with the greatest width at the middle.

While I was at the nest the birds eyed me curiously but showed no solicitude.

A. N.

A Letter from "Davie," Relating to his New Work on Taxidermy.

Nov. 1, 1890.

DEAR MR. LATTIN:

You ask in your letter of October 28th concerning the progress of my work on taxidermy, particularly as to the number of subscribers obtained, etc.

I should state that since the five proof illustrations and the four-page circulars have been printed, the number of subscribers is exactly *two hundred and twelve*.

The proofs and circulars are being sent to all subscribers and to any person who may desire to examine into the style of the work before subscribing for it.

When the *five hundred* subscribers have been obtained at the present price, \$5.00, the price of the work will be advanced to \$7.50 per copy. With the proof illustrations for examination, I hope to be able to increase the list more rapidly than heretofore. No man I know cares to contract for something he has not seen or knows nothing of, except what printed circulars may say of it. Especially is this the case when the country is flooded with subscription books, the most part of which are nothing more or less than trash—gotten up for no other purpose than to make money. It is true, however, that in a business point of view a man is not a success who does not make money; yet there are often those who will ride their hobby-horse at an expense.

In 1883 I had the pleasure of skinning two African Elephants of small size. They had died in a menagerie which was wintering near Columbus. From these the first sketches and drawings were made for my work by Dr. Jasper, for the building of the frame-work for large quadrupeds. Drawings were shortly after made from actual specimens of horses and dogs in course of preparation. Dog heads, according to my note book, then received our attention until no less than nine completed jobs (among them common curs) were finished for our purpose. This was the case with the birds, and in every instance extensive notes were taken during the course of preparation.

The skinning and mounting of snakes and turtles is, I think, interesting, and as clearly laid off as in the case of birds and mammals.

On the mounting of long-necked birds an original method is given, and I feel sure the illustrations showing the method will be a revelation to many.

We think we have laid down the best plan or system which angles and lines can exhibit for obtaining accurate positions in the legs of birds in stepping and running attitudes, this being one of the common faults in mounted birds in active positions.

You will remember that our first circular stated that the work would contain fifty plates; we have added four more practical plates, and if we can think of other illustrations which will make the practical portion of the art more clear we shall certainly, even yet, increase the number of plates. You have observed that many of the original illustrations which you examined are not mentioned in the advertisement of the work; one especially which pleases me is the oological plate representing a handsome nest bound in threads for preservation, together with egg drill, blow-pipe, embryo hook, etc., etc. The chapter on this subject is, I think,

as extensive and minute as any person will desire.

You will distinctly remember the several plates on the mounting of the horse, containing all the minute details of the process, beginning with illustrations of the cutting out of the center board, then with the half-round side pieces, the sawing and bending of the neck-piece, and the whole lathing of the frame and the completed model in clay. The same is carried out in the illustrations of the Greyhound.

The text is full upon the skinning and dressing down of the skins, the management in each case and the best liquid solutions for baths is given for preservation of skins and relaxing before placing them on the clay model.

The work at this date is *ready for press* and when the prospects are good for obtaining the 500 subscribers, the book will surely appear within at least sixty days thereafter. The present indications are encouraging and all subscribers will receive due notice previous to the appearance of the work.

To be frank with you, I feel that I have already invested so much time and money in the project, that I really do not expect to be compensated by any remuneration from its publication. All I can hope for is to see the work completed in the manner which the circulars have explained. I must give due credit to THE OOLOGIST for its influence in securing a large portion of the subscribers already obtained, and I heartily thank you for your kind and liberal assistance.

Very truly,  
OLIVER DAVIE.

[By permission, we print the above letter from Mr. Davie. Our readers will find therein, answers to the many queries they have deluged us with regarding Mr. D.'s great work on Taxidermy.—Ed.]

# THE OOLOGIST

A MONTHLY MAGAZINE DEVOTED TO  
ORNITHOLOGY AND OOCY.

**FRANK H. LATTIN, ALBION, N. Y.**

EDITOR AND PUBLISHER.

**NEIL F. POSSON, MEDINA, N. Y.**

ASSOCIATE EDITOR.

Correspondence and Items of Interest to the student of birds, their Nests and Eggs, solicited from all.

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Single Subscription, - - - - 50c per annum.  
Sample Copies, - - - - - 7c each.

The above rates include payment of postage by us.

Send stamp for Premium List.

All subscriptions must begin with either *January* or *July* issues.

Remember that the publisher must be notified by letter when a subscriber wishes his paper stopped, and all arrearages must be paid.

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**FRANK H. LATTIN,  
ALBION, Orleans Co., N. Y.**

\* \* Articles, Items of Interest and Queries for publication should be forwarded as early in the month as possible and can be mailed to either the Publisher or the Associate Editor, as you may prefer.

ENTERED AT THE POST OFFICE AT ALBION, N. Y., AS SECOND-CLASS MATTER.

"The Bittern" of Damariscotta, Me., speaks editorially of ye editor as "probably the best known dealer in curiosities and specimens of Natural History in America." Midst a daily mail, ranging from fifty to one hundred and fifty pieces, we are at a loss to know whether to ascribe the great diffusion of blushes that covers our lovely features to guilt, modesty or excessive bashfulness.

A. M. George, Gibbon, Neb., writes us an interesting account of unexpectedly finding set of Wood Duck of June 22, '89, while on a fishing excursion.

Our old friend, Mr. C. B. McPhersons, of St. Petersburg, Fla., sends us a good article on the killing a "gator;" but as it is not egg-zactly oological, we were obliged to return it with our regrets.

Mr. L. G. Beckwith, of Bay City, Mich., writes of finding a Phoebe's nest as follows: "Found it on the side of a boat house, on the shore of Timber Lake, near Pontiac, Mich. A spike had been driven through the walls, from the inside, and had projected two or three inches on the outside of the shed. On this, and the splinter which the nail had detached, the nest, which was exactly like a common Phoebe's, was placed. It contained three eggs, two of a light cream color, unspotted, and one of the same ground color as the other, but having reddish spots on the large end."

Subscriber, Ottawa. The eggs of the Bohemian Wax-wing are in color and markings almost exactly like those of its smaller relative, the Cedar Wax-wing; in size, however, they are much larger—averaging about 1.03 x .70 in.

H. C. L., Santa Barbara, Cala. The Shrike of your locality is the California Shrike; this species was formerly supposed to be the White-rumped.

B. C. R., Toulon, Ills. Your sparrow, nesting in a big thistle close to the ground, was doubtless the Song.

The Snowy Owl nests in the far north; we have not the space to give its plumage, etc., in detail, as the bird is too well known to most of the OOLOGIST'S readers.

Manton's "Taxidermy without a Teacher" is sold more extensively than any other 50c work on the subject.

Your long-legged Waterbird was undoubtedly a Heron of some species.

C. C. R., Boyce, Va. Your "Wood-hen" is doubtless the Pileated Woodpecker.

R. H. M., Memphis, Tenn. From your meagre description, should say your egg was that of the American Goldfinch.

H. E. H., Dryden, N. Y. Your "tip up" is the Spotted Sandpiper.

C. R. B., Little Rock, Ia. Descriptions of the Least Flycatcher and Dickcissel or Black-throated Buntings can be found in any reliable ornithology or in back numbers of THE OOLOGIST.

This answer will also apply to the many correspondents desiring descriptions of birds.

To those desiring descriptions of eggs we must refer as per the above answer and to Davie's "Key to the Nests and Eggs of North American Birds."

W. M. B., Los Angeles, Cal. Desires to know the difference between the Parkman's and Western House Wrens.

Mr. C. C. Purdum, of Wood's Holl, Mass., sends us his method of taking notes on migration, which, by the way is excellent, but as former OOLOGISTS have contained similar methods, we do not publish.

C. A. V., Lake City, Minn., writes. "During one of my collecting trips this season I found a Blue Jay's nest containing four eggs, together with which was an egg very similar to a Whip-poor-will, being about the same color, shape and size, though more glossy and smoother. Can you enlighten me as to what variety of a bird deposited that solitary egg?" We would suggest that the stray egg must either have been a Blue Jay "sport" or a large egg of the Cowbird.

#### Notes on *Ardea Herodias*.

The Great Blue Heron, familiarly known as the Blue Crane, is a common summer resident in Wisconsin. It frequents slow streams, muddy lakes and marshes and often flies twenty miles from its nesting place for feeding grounds.

They do not go in large numbers, generally in twos and threes. Often coming upon them in my rambles, when thus silently fishing, I was led to believe there must be a heronry near and the more so when I found that they generally came from and returned in a certain direction. By inquiry I located it as being some where in a tamarac swamp covering at least 250 acres and distance some 15 miles—as the crow flies—

In May, '87, with a friend, I visited

the swamp and after a good deal of climbing we found the heronry; but the nests all contained young. Although we only reached about a dozen nests, as we had no climbers along, we were satisfied that the above was the case, for at the foot of trees, containing nests, we could find pieces of shells, and where the young were large, could see their legs projecting over the edge of the nest.

An approaching storm drove us out long before we wished to go, and I then and there resolved to go earlier in '88. Being sick at the time set I put it off till '89. This was my lucky year; and so on the morning of the 20th of April, at 3:00 a. m., in company with a friend, I started out. The Horned Larks were abundant on the uplands and sang till dawn.

Song Sparrows, Juncos, Jays, Robins and Bluebirds were common along the roadside. We noticed two new arrivals for the season also; but, seeing a Heron fishing by a stream, we let our thoughts travel far ahead, and I wished, before we had got over the last five miles, that our feet might travel as fast.

We reached the swamp at 6:10 and waded in.

The water was three feet deep at the edge, but as we advanced towards the center it grew better. We reached the nests at 8 o'clock and the sight we then saw repaid us well for the wet clothes and bruised bodies. The day was a perfect one. The herons, some sitting on the nests and some flying about uttering at times their harsh *Konk! Konk!* made a picture I shall never forget.

The sun shone brightly and the air was shifting, but not stopping for a rest, we strapped on our climbers and made for the nearest trees containing eggs, and started on the ascent. We were, or rather I was, doomed to disappointment again, this year, for we discovered much to our chagrin—a party

had visited the swamp two days ahead and taken all the available sets. It was with difficulty my friend secured a set of four.

The average size was 2.68 x 1.82. The texture of the shells was very rough and they were covered in places with a calcereous deposit.

The nests, some two hundred in all, were placed on an average of forty feet from the ground. They were composed of reeds, found at the edge of the swamp, and some, mostly of the year, were lined with straw. The older ones, besides being dirty and weather beaten, showed signs of extra material having been added on year by year. The swamp has evidently held this heronry for years as the ground is white in some places so great is the accumulation of manure. The old nests are strong enough to bear the weight of a man, but as most members of the genus *homo* do not have the happiest of sensations when fifty feet from terra firma and swinging out far enough to reach over and get into the nests, I would advise that persons tunnel through them to get the eggs. The view from these trees—the tallest ones—is excellent and it was with reluctance we would put our glasses away when ready for coming down.

After a good deal of tramping we found our way out of the swamp and ate our dinner at the edge. While in the swamp we noticed the following birds: Mourning Dove, Am. Crow and nest with eggs, Flickers, Red Headed Woodpeckers, B. C. Chickadee, W. B. Nuthatch and Red Shouldered Hawks, but they were all very quiet and eluded our gaze as much as they could.

About a week after visiting the swamp I found that I had been severely poisoned with poison sumac. Although a certain doctor does not allude to it in his article on the dark sides of a collector's life in the O. & O. I should call it one of them; but, he may be writing from a doctor's standpoint, and

so he is able to reply: "Sirs, ye know, that by this craft we have our wealth."

On Apr. 21, 1890, in company with a friend, I visited the swamp again, but the heronry looked as though it was not half of its original size and the only occupied nests were in the very tallest trees. On inquiry from a farmer I learned that a taxidermist from an adjoining town came down and carried away three or four bags of skins and this with the havoos made by the Crows in robbing the eggs and the fiendish collectors will in time break up what must once have been an immense colony. Perhaps no one feels more indignant at those who will help to bring this about than the farmers living in the immediate vicinity to the swamp who believe the Crows, as they call them, are a benefit to them. In the hereafter that man who is caught carrying away eggs or skins may expect rough treatment at the hands of these good men.

The Great Blue Heron arrives in this latitude about the middle of March, but its return is variable. Following is *Ardea herodias's* modest "bill-o-fare": "Crabs, eels, shell fish and various fishes," (De Kay.) "In a carp pond one has been known to eat one thousand stone carp in a year," (Wilson.) Prof. F. H. King found a bull head in the stomach of one which measured 8½ inches in length. "Snakes, frogs, mice, fishes and insects," (Samuels.) "Fish of all kinds, frogs, lizards, snakes, birds, shrews, meadow mice, young rats and dragon flies. It destroys great numbers of Marsh Hens, Rails and other birds," "Audubon."

EDWARD P. CARLTON,  
Wauwatosa, Wis.

#### The Prothonotary Warbler.

This handsome little Warbler arrives here about the 10th of May. This year (1890) I have found only two pairs during the season, so they are not what we would call common.



It seems as though their only object in coming here, is to raise their little family and get away again as quickly as possible. For several years I have tried to take a set of their eggs,—this season I am rewarded for my efforts with a nice set of six.

On the 7th of May I noticed a male. He seemed to be in a great hurry to find a nesting site, and spent considerable time looking down a small stove-pipe that was sticking through the top of a fish-house,—a very poor place for him to keep house. To help the little fellow along, I cut a hole in a cigar-box and nailed the box up near by. The next day I found him very busily engaged carrying moss into the box. The 12th, a female was there to assist in the work,—the most important part of the family of course, and the nest was completed in three days. Here came a stop to the proceedings by the disappearance of the female for about a week. Six days after her return, she completed the set of six.

The nest was made entirely of moss, lined with a few horse hairs. The eggs are white, with a slight pinkish tinge, spotted over the entire surface with reddish-brown. On one, the dots form a ring around the middle of the egg,—on another, the smallest in the set, the dots are quite fine. A few days after taking the eggs and nest, I commenced to look around for the next nesting-place. Passing a barn one morning, I was surprised to see the female come out of the barn through a broken window. In a short time, she was back again with a mouthful of leaves.

After waiting a few days, I returned to search for the nest. Standing on a shelf near the window, was a tin cup, and there in the cup was the nest with one egg. This time the complete set was four, which I let her hatch. The eggs were very similar to the first set.

The nest was made of dry leaves and fine dry grass, with a few horse hairs

for a lining.

WHIT HARRISON,  
Houston Co., Minn.

#### Breeding of the Virginia Rail.

On the 15th of June, 1890, while investigating a swampy tract near here for eggs of the common Red-wing Black-bird, I discovered an egg lying on the ground, in a depression on a small hummock, caused by a fast disappearing stump. On first finding it I could think of nothing but the American Woodcock, though the egg seemed very small for that bird. But after reflecting I concluded that it must be some other bird as it was far too late for the Woodcock to be breeding, here at least. As I knew the set could not be complete, I concluded to leave it for positive identification and more eggs, when found the nest was 5 inches deep, with no lining whatever. On June 17th I visited the nest again and did not find any bird on the nest. It was raining hard and the water was high around it. The nest was well lined with dead flag, stalks and moss so as to nearly fill the cavity. It now measured 7 inches in diameter and was but slightly hollowed. There were 4 eggs, all alike.

I was now certain that it was no Woodcock's nest as the Woodcock sets very soon after she lays the 3d egg, so I left the nest for further watching, which as I afterward found was fortunate. On the 19th I visited it again and found the bird at home.

I had never seen anything like it before so I did not disturb the nest though I saw as she left the nest that there were 6 eggs. As the bird ran around in the flags I took a good picture of it in my mind and then went home and got out my Key and found that it was the Virginian Rail. As I had never found this bird here before, though the Carolina Rail is common, I naturally felt much elated.

On the 21st I made my last trip when I found eight eggs, not daring to wait for any more eggs as the swale was much frequented by other eggers. I shot the old bird and took the eggs. They were all alike, light cream in ground color, finely spotted with light brown, with lavender shell spots. They were very even in size, measuring about 1.19 x .94 with very light variations. I had both the eggs and bird's skin identified and am sure of the bird.

ERNEST H. SHORT.

Chili, N. Y.

#### The Turkey Vulture.

This large bird breeds throughout all our country, in all suitable places. This bird does considerable damage here at times. They kill a large number of young pigs here every year and when I used to herd my father's sheep they killed lots of young lambs. They all attack young calves.

I don't know that I have ever found a calf that was killed by the birds, but have them with their tails and ears bit off by the buzzards and they will sometimes pluck eyes from a cow or horse which is too poor or sick to get up when down and leave the poor animal to face death without an eye.

The bird does considerable good, but it is so well known there is so use to mention it. They will eat any kind of flesh but prefer it fresh. I have known them to eat each other and they also eat mud and I believe can live on it for a long time. I have taken several sets of these birds' eggs this year and I found two of the birds that were tame, I had to pull them off to get the eggs.

I could write a half a day on this bird but for fear of the waste basket I will close. Some one tell me if they had to lift them from the nest to get the eggs.

KIT ATKINSON.

Dime Box, Tex.

#### The Yellow Rail, *Porzana noveboracensis* (Gmel) in Michigan.

In a list and article "Family Rallidae in Michigan," in the OOLOGIST of June 1888, written by myself (*Scolopax*), only a very few lines were devoted to the Yellow Rail as it was unknown to me. Since then considerable time has been given to the various lists published on birds of this state, and also to writing to various collectors regarding its presence here.

I find in the notes of numerous observers in the state and of the many collectors since 1839 that the following have recorded the species: First Sager's list published in 1839, the first catalogue of birds in the state. Miles also embraces it 1860. "Summer sojourner," according to A. H. Boies in his list of Birds of Southern Michigan 1875. Covert in his list of '78 says,— "Rare, Nine taken."

These are the only published lists recording it worthy of consideration, excepting Steere's list—Migration of Michigan Birds, 1880, which says,— "breeds." This is unexpected, and as the species has never been found breeding by other collectors here, a few lines from Professor Steere would be most acceptable on this question. In my list published by the U. S. Geological and Geographical Survey 1879, the Yellow Rail was embraced on authority accepted, and never till now has my acceptance of the bird as a Michigan species been verified by myself. At dusk on October 19th, as two hunters of renown of this city, Messers. O'Byrne and Francoise were returning from a snipe shoot, they flushed an immature specimen of this interesting little bird from thick grass on low land near water, noticing it flew peculiarly and was a bird new to them, they shot it and gave it to me. One mark they noticed in particular which may be a point of identification when the bird is

on the wing—the white spot on secondaries is plainly to be seen. They say that the bird sprung up with more vigor and flew swifter than the other rails.

This species lays six to nine eggs, which are of a rich buff-brown and are marked with reddish dots at the larger end. The eggs average about 1.09 x .83. The nest is rarely found and the eggs are very desirable; and remarks about the breeding habits will be thankfully received by oologists.

MORRIS GIBBS,  
Kalamazoo, Mich.

Epitome of "The Young Oologist" and "Oologist" from Birth to Date.

In presenting this recapitulation of THE YOUNG OOLOGIST and OOLOGIST, it is our intention to review briefly the many good things which, in our self-consciousness, we claim to have given to our readers, since the little journal took its origin; to take, as it were, a sort of retrospective glance at our career; or in the words of the poet, "to cast one longing, lingering look behind."

As we look back over the seven volumes which comprise THE YOUNG OOLOGIST and OOLOGIST, we become aware that we are entertaining an almost unconscious feeling of pride, for which there may perhaps be a reason. The saying: "If a man blow not his own horn, by whom will it be blown?" contains more of truth than of poetry. And so, rather than run the risk of having our horn bespoiled with the rust of dis-use, we proceed to blow it ourselves. As an initiatory blast, we desire, conceitedly, to say that we believe that the seven volumes now nearly completed, comprise the most popular magazine devoted to birds, their nests and eggs ever published.

However, it is not the purpose of this article to sing the praises of the little journal, or to exalt it in any way; but merely to criticise it in a fair and impartial manner as though it were the work of other hands; censuring where censure is needed and commending where commendation is just.

We proceed directly to speak of the different volumes in detail, listing the

articles which are of major importance.

THE YOUNG OOLOGIST.

Volume I and II—Monthly.

As we look at Vol. I, No. 1 (May, 1884) and remember the time when we made "our start," and sent out our first number, we kind of chuckle with the memory of the thing. But, desisting from chuckling and noticing the succeeding numbers, we observe a marked improvement in each one, reaching better paper and colored cover, and finally culminating in June, 1885, at the close of Volume II, in an A. No. 1 32-page journal, full of excellent matter of great use and benefit to every live collector, and as good an ornithological journal as was published.

Each number of Volumes I and II had more or less space devoted to the answering of the queries of our correspondents.

In April, 1885, at the close of Volume I, a complete and exhaustive index of that volume, together with title page for binding, was published.

From out of the many things which Volumes I and II afforded, we take space to mention only the following:

1. "Instructions for Collecting Bird's Eggs." By J. Parker Norris. Vol. I, Nos. 1 and 2. May and June, 1884, (continued). Pages 3 and 19. A reprint from *The County Gentleman*.

2. "Great Horned Owl." Editorial. *Ibid.*, No. 1, p. 5.

3. "Ground Dove" (*Chamapelia passerina*). By T. B. Perry. *Ibid.* p. 10.

4. "Eggs of the Virginia, Sora, and Clapper Rail." Editorial. *Ibid.*, p. 11. Notes wherein these eggs differ from each other.

5. "Painted Bunting or Nonpareil." (*Passerina ciris*). By Tronp D. Perry. *Ibid.*, No. 2, June, 1884, p. 21.

6. "California Mottled Owl." By H. R. T. *Ibid.*, p. 23.

7. "Notes on the Nashville and Hooded Warblers, and Golden-winged Woodpecker from Dighton, Mass." By C. S. P. *Ibid.*, p. 26. Notes a set (?) of 71 eggs of the Golden-winged Woodpecker taken during 73 days.

8. "Ornithology of the Island of Montreal." By W. D. Shaw. *Ibid.*, p. 27. Enumerates a list of 168 species of birds frequenting the island of Montreal as observed by Mr. Ernest D. Winter and the writer.

9. "Oological Items from Waterville, Maine." By C. B. W. *Ibid.*, No. 3, July, 1884, p. 35.
10. "Yellow-shafted Flicker." By W. B. K. *Ibid.*, p. 35.
11. "Yellow-headed Blackbird." By J. W. Preston. *Ibid.*, p. 36.
12. "Orchard Oriole" (*Icterus spurius*.) By T. D. Perry. *Ibid.*, p. 38.
13. "The Black Stilt." By A. M. Shelds. *Ibid.*, p. 41.
14. "Cardinal Grosbeak" (*Cardinalis virginianus*.) By T. D. Perry. *Ibid.*, No. 4, Aug., 1884, p. 57.
15. "How to Make and Use Bird Lime." A reprint from *Pease's Feathered World*. *Ibid.*, p. 59.
16. "The Eagle's Nest." By E. H. F. *Ibid.*, p. 61. Notes a difficult climb for a Golden Eagle's nest.
17. "California Birds; Their Eggs, Nests and Habits." By A. R. H. *Ibid.*, No. 5, Sept., 1884, p. 75. Contains interesting notes on several Californian birds.
18. "Nest of the Black-throated Green Warbler" (*Dendrocca virens*.) By H. H. M. *Ibid.*, p. 77.
19. "Bachman's Finch." (*Peucaea aestivalis*.) By T. D. Perry. *Ibid.*, No. 6, Oct., 1884, p. 83.
20. "Dove vs. Robin." By H. E. Deats. *Ibid.*, p. 83. Relates the using of a deserted Robin's nest by a Mourning Dove.
21. "Wisconsin Birds" By C. McCollum. *Ibid.*, p. 92. Enumerates 270 species of birds observed by the compiler in the central and eastern parts of the state.
22. "A Singular Duel." By C. B. Wilson. *Ibid.*, No. 7, Nov., 1884, p. 98. Notes a contest between a Blue Jay and a Sharp-shinned Hawk.
23. "Spurred Towhee; Least Tit." By H. R. Taylor. *Ibid.*, p. 100.
24. "Dove vs. Robin; White Robin Eggs." By J. L. Hollingshead. *Ibid.*, p. 103.
25. "A Four-Story Nest of the Summer Yellow-bird." By L. H. A. *Ibid.*, p. 107.
26. "Blue Grosbeak." (*Guiraca cerulea*.) By T. D. Perry. *Ibid.*, p. 107.
27. "Flickers in a Church Tower." By G. F. B. *Ibid.*, p. 108. Relates the nesting of six pairs of Flickers in that unusual place.
28. "The American Woodcock." (*Philohela minor*.) By Charles L. Phillips. *Ibid.*, No. 8, Dec., 1884, p. 112.
29. "Dove vs. Robin." By George P. Elliot. *Ibid.*, p. 113.
30. "The American Redstart." (*Setophaga ruticilla*.) By W. T. E. *Ibid.*, p. 119.
31. "A Five-Story Nest of the Summer Yellow Bird." By W. S. Scott. *Ibid.*, p. 120.
32. "Jottings from the Note-book of a Collector in Texas." By J. A. Singley. *Ibid.*, No. 9, Jan., 1885, p. 122. Contains many interesting notes, breeding, dates, etc.
33. "Trees Injured by Sap-suckers." *Ibid.*, p. 123. A clipping from an article of B. Horsford's in the Forest and Stream of March, 1883.
34. "The Barn Owl in Southern California." By Joseph L. Edmiston. *Ibid.*, p. 125.
35. "Nesting of the Winter Wren." By William L. Kells. *Ibid.*, No. 10, Feb., 1885, p. 133.
36. "Little Screech Owls in Pigeon and Poultry Houses." By E. C. W. *Ibid.*, p. 137.
37. "Prehensile Power of the Feet of the Crow." By Montague Chamberlain. *Ibid.*, p. 137.
38. "The Black Snowbird." By H. H. McAdam. *Ibid.*, p. 140.
39. "White-bellied Nuthatch." By E. T. Mack. *Ibid.*, p. 142.
40. "Correspondence." *Ibid.*, No. 11, March, 1885, pps. 146-150. Contains many interesting notes from many collectors, among which may be mentioned: "Ornithological Synonyms" by Dr. P.; "From California" by J. L.; "Nuttall's Poor-Will" by G. L. B.; "Meadow Larks in Winter" by T. M. D. P.; "From Wisconsin" by C. K.; "Collecting Among the Calaveras Group of Big Trees" by C. N. C.; etc., etc.
41. "Gambel's Quail." (*Soportyx gambelii*.) By Warren Carter. *Ibid.*, p. 154.
42. "The Maryland Yellow-throat" (*Geothlypis trichas*.) By Charles S. Phillips. *Ibid.*, p. 156.
43. "White-rumped Shrike." By Cyril Marr. *Ibid.*, p. 157.
44. "Land Birds of the Pacific Coast." By Edward H. Fiske. *Ibid.*, p. 158. Enumerates 297 species of land

birds occurring on the Pacific Coast between Alaska and Mexico.

45. "The Red-tailed Hawk." (*Buteo borealis*). By George H. Selover. *Ibid.*, p. 161.

46. "The Marsh Hawk." (*Circus hudsonius*). By Fred S. Odle. *Ibid.*, p. 161.

47. "Bartram's Gardens." By Harry G. Parker. Vol. II, No. 1, May, 1885, p. 1. Relates a visit to those celebrated gardens, giving much of general information concerning them.

48. "South Carolina Notes." By W. W. Northington. *Ibid.*, pps. 3-8. Gives extended notes on 103 species observed at St. Helena Island during March and April.

49. "Scientific Names." By Montague Chamberlain. *Ibid.*, p. 8.

50. "Nesting of the Great Horned Owl." By "Ortyx". *Ibid.*, p. 10.

51. "From Wisconsin." Correspondence from C. A. K. and B. W. *Ibid.*, pps. 17 and 18. Contains interesting notes on the White-bellied Nuthatch, Red-throated Diver, and Cedar Waxwing; also gives the dates of arrival, at Lake Koshkonong, of the different species of ducks.

52. "Interesting Happenings." By W. G. T. *Ibid.*, p. 22. Queer habits of the Crow and Spotted Sandpiper.

53. "A Newsy Letter from Texas." By J. A. Singley. *Ibid.*, p. 24.

54. "American or Red Crossbill." By E. T. Mack. *Ibid.*, No. 2, June, 1885, p. 25.

55. "Notes on the Cuckoos." By

H. K. Jamison. *Ibid.*, p. 29. Notes an instance of the Yellow billed Cuckoo depositing its eggs in the nest of a Black-billed; and of a Cuckoo's laying in an uncompleted nest.

56. "Notes from California." By E. H. Fiske. *Ibid.*, p. 29. Mostly concerning nesting habits.

57. "Nest of the Golden-winged Warbler." By William L. Kells. *Ibid.*, p. 31.

58. "The Fox Sparrow." (*Passerella iliaca*). By William L. Kells. *Ibid.*, p. 32.

59. "The Redhead." By A. M. Shields. *Ibid.*, p. 32. Among other things, relates the taking of fourteen Redhead's eggs, three eggs of the Ruddy Duck, and five of the Coot from one nest of the Redhead.

60. "The Horned Lark." By G. F. Breuninger. *Ibid.*, p. 41.

61. "Pygmy Nuthatch." By T. D. Perry. *Ibid.*, p. 44.

62. "Ferruginous Rough-Leg." By F. M. Dille. *Ibid.*, p. 41.

The foregoing enumerates only the articles upon the rare species and those concerning novel and unusual occurrences, and really mentions but a small proportion of the subject-matter of the *Young Oologist*.

The *Young Oologist* ceased publication with Vol. II, No. 2, and so Volume II, comprises but two numbers.

The following January, the *Oologist* made its appearance, posing as *Volume III*. The *Oologist* will be considered in succeeding numbers.

(To be continued.)

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## CONTENTS.

The following table of contents enumerates some of the principal articles in each issue. The "short articles" mentioned are one column or less in length and are all of great value to the student.

Not mentioned in the list of contents, each issue contains one or two pages of "items" or "brief notes", one column to two pages of exchange notices, and from three to eight pages of advertisements, besides a "query column" which occurs in many, although not all issues.

## THE YOUNG OOLOGIST.

VOLUME I. Nos. 1, 2, 3, 4, 5, and 12 each contain 16 pages. Nos. 6, 7, 8, 9, and 10 each contain 20 pages. No. 11 contains 36 pages.

- No. 1.—Instructions for Collecting Birds' Eggs, (3 pages); Coon's Key; Twenty-four short articles. May, '88.
- No. 2.—Instructions for Collecting Birds' Eggs, concluded, (2 pages); Painted Buntings; Cala. Mottled Owl; List of Birds Found at Montreal; 21 short articles. June, '84.
- No. 3.—Maine Items; Yellow-headed Blackbird; Orchard Oriole; The Slip System; Wilson's Thrush; Hand-book of Agassiz Association; 23 short articles. July, '84.
- No. 4.—Screech Owl; Importance of Identification; A La. Heronry; Cardinal Crossbeak; Eagle's Nest; How to Make and Use Bird Lime; 14 short articles. Aug., '84.
- No. 5.—Bird-nesting—To Collect Scientifically, (3 pages); Cala. Birds; From Wyoming; 22 short articles. Sept., '84.
- No. 6.—Bobolink, (2½ pages); Sea Birds of Maine; Eggling in Cala. Swamp; Old "Put" and the Bird's Nest; List of Wisconsin Birds; 12 short articles. Oct., '84.
- No. 7.—Bronzed Grackle; Singular Duel; Fish Hawk; Spurred Towhee and Least Tit; Old "Put" and the Bird's Nest; Bird Island; 14 short articles. Nov., '84.
- No. 8.—The Alligator; Collecting in Marshes; Woodcock; "Our Birds in Their Haunts"; Iowa Notes; Re-start; Summer Redbird; 18 short articles. Dec., '84.
- No. 9.—Baltimore Oriole; Texas Jottings; Sapsuckers; Barn Owl; American Ornithologists' Union, (3 pages); How to Handle a Gun; Black-capped Titmouse; Egg of the Moa. Jan.
- No. 10.—Winter Wren; Cala. Duck Hunting; Screech Owl; *Daric's* Egg Check List; Peacock with Queer Tastes; White-bellied Nuthatch; Blue Jays; Spotted Robin Eggs; 8 short articles. Feb., '85.
- No. 11.—Bank Swallow; English Sparrows; Study of Birds; Gt. Horned Owl; Yellow-billed Cuckoo; Gambel's Quail; Conn. Notes; Intelligence of the Oriole; Yellow-breast Chat; Maryland Yellow-throat; White-rumped Shrike; List of Pacific Coast Birds; Knights of Audubon; Sample Data Blanks. (4 pages); 32 short articles. March, '85.
- No. 12.—*Completes Vol. I.* Title pages for binding, with complete and exhaustive index. (8 pages). April, '85.
- VOLUME II, consists of but two numbers. Each contains 32 pages.
- No. 13.—Bartram's Gardens; South Carolina Observations, (6 pages); Scientific Names; Gt. Horned Owl; Bank Swallows; Knights of Audubon; Hummingbird; R. I. Notes; Texas Jottings; 20 short articles. May, '85.
- No. 14.—American Crossbill; Audubon's Birds of America; Illinois Notes; Destruction of Birds; Cuckoos; Cala. Notes; Wrens on the Warpath; Golden-winged Warbler; Fox Sparrow; Our Winter Birds; Snipe Creek; Red-head; Wisconsin Jottings; Burrowing Owl, etc.; A Florida Trip; Horned Lark; Queer Homes and Nesting sites; Brave Bird; Ferruginous Rough Leg; Sparrows; Pigmy Nighthawk; 26 short articles. June, '85.

## THE OOLOGIST.

Volumes III. and IV. are Bi-Monthly. The remaining volumes are Monthly.

- VOLUME III, each issue averages 12 pages.
- No. 15.—Full page Frontispiece.—*American Water Buzzards and Vireo*; Chester Island and the Marsh Wrens; Birds of Cortland Co., N. Y., (4½ pages); A Cheap Cabinet; Nest of the Black-and-white Creeper; Summer Birds about Washington, D. C.; Davie's Nests and

- Eggs of N. A. Birds; Water Blowpipe; 5 Short Articles. Jan. & Feb., '86.
- No. 16.—Vagary of a Collector (Great Horned Owl, Climbing Strap); A Hunt for Tern Eggs; Birds of Cortland Co., N. Y.; Notes from North Carolina; Whip-Poor-Will; Nest of the Brown Creeper; Black-billed Cuckoo Depositing Eggs in a Yellow-billed Cuckoo's Nest; Cannibalism of the Red-headed Woodpecker; 23 short articles. March & April, '86.
- No. 17.—History of a Bird-Box; Tree Sparrow; Nests of the Green Heron; Bird Notes from Iowa; A Difficult Climb after a Red-tailed Hawk's Nest; Review of the Check-Lists of N. A. Birds, with special Reference to the new A. O. U. List (3 pages); The State of Maine as a Field for the Ornithologist; 16 short articles. May & June, '86.
- No. 18.—My first White Crane's Nest; Spring Notes; Notes from Chester County, Pa.; Turkey Buzzards; How to Make a Cabinet; Chewink Nests in a Tree; A Cabinet for a large Collection; 13 short articles. July & Aug., '86.
- No. 19.—Collecting on Long Island; Chimney Swift; A Day with the Loons; Illinois Bird-Notes; Marsh Wrens; A Plucky Wood Pewee; Minnesota Notes; Yates County (N. Y.) Notes; 8 short articles. Sept. to Nov., '86.
- No. 20.—*Completes Volume III.* Title pages for binding, with complete and exhaustive Index of Volumes II. and III. Dec., '86.
- VOLUME IV, each issue averages 12 pages.
- No. 21.—Birds of Chester County, Penn. (40 pages); Chestnut-sided Warbler; Massachusetts Letter; Bills of Birds; 3 short articles.
- No. 22.—Notes from Spoon River Region, Illinois; Peculiarities of the Ruby-throated Hummingbird; Purple Gallinule; How to Collect; Bird Surgery; Rufous-vented and Bendire's Thrashers and Canon Towhee; Newsy Items; Notes from College Hill, Ohio; Nesting of our Swallows; Notes from Sullivan Co., N. Y.; Blue-Gray Gnatcatcher; Notes from Connecticut; Fidelity of the Song Sparrow; 13 short articles. March to May, '87.
- Nos. 23-24. Combined number.—Tour in the Woods at Fort Washington, Pa.; National Museum (Department of Birds, Nest and Eggs); Beaver County, Pa. Notes; Black-capped Chickadee; Hawking; Agassiz Association and its Work; Crow Roosts of New Jersey; Swainson's Warbler; Destroy the Cowbird; Traill's and Acadian Flycatchers; 7 short articles. June to Sept., '87.
- Nos. 25-26. Combined number.—Garnet; White Pelican; Black-capped Chickadee; Mockingbird; Late Collecting; Yellow-breasted Flycatcher; 5 short articles. Oct. to Dec., '87.
- VOLUME V, 16 pages each issue.
- No. 27.—Brown Thrasher; Bald Eagle; Shooting a Golden Eagle; Florida Jottings; Destructive Nesting (English Sparrow); Arctic Terns; Notes from Lincoln County, Maine; Acadian Flycatcher; Red-shafted Flicker; 14 short articles. Jan., '88.
- No. 28.—Title pages for binding, with complete and exhaustive Index of Volume IV.; Egg of *Epyornis Maximus*, the Colossal Bird of Madagascar (6½ pages); Fish Crow. Feb., '88.
- No. 29.—*Icterus spurius*; Water Blowpipe; Cardinal Grosbeak; Kansas Notes; A Moonlight Trip; Among the Coots on St. Clair Flats; Brown Thrush in Confinement; 9 short articles. March, '88.
- No. 30.—Boat-tailed Grackle; Destruction of our Native Birds (4 pages); Gleanings from Correspondence; Nest in a Horseshoe; 5 short articles. April, '88.
- No. 31.—Oology (Advice to Collectors); Bald Eagle; A Snipe Hunt; Notes taken at Norris-town, Pa.; Modification of *Icterus mississippiensis*; Among the Warblers; Chestnut-sided Warbler; 6 short articles. May, '88.
- No. 32.—Family *Rallidae* in Michigan (3½

- pages); Egg Collecting; Bird Voices; Road Runner; Notes on the Birds of Beaver, Pa.; 3 short articles. June, '88.
- No. 33.—Loon or Great Northern Diver (2 pages); Eggs of Mississippi Kite; Nesting of Brown Pelican; Breeding Habits of American Flamingo (3 pages); 3 short articles. July, '88.
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- VOLUME VI. 20 pages each issue.
- No. 39.—Title pages for binding, with Complete and Exhaustive Index of Volume V.; Breeding Habits of the Bridled Tern; Wood Thrush and Brown Thrasher; From Western North Carolina; Birds of Broome Co., N. Y.; Peculiar Egg of *Corvus frugivorus*; Cuckoos; Notes from Alabama; Carolina Parakeet; 12 short articles. Jan., '89.
- No. 40.—A Red-headed Family (*Picidae*) (6½ pages); Raptors of Michigan; Wild Turkey; Birds of Iowa; The "Critic" Criticised; 8 short articles. Feb., '89.
- No. 41.—Directions for making a Bird or Mammal Skin; The Owl; A Crow Quandary; Birds of Macon County, Ga.; Collecting Experience; Story of a Tame Crow; 6 short articles. March, '89.
- No. 42.—Raptors of Michigan (3 pages); Nesting of the Tufted Tit; Peculiarities in Sets and Eggs of a Few of our Commoner Birds; Difference between White-rumped and Loggerhead Shrikes; Birds of Grafton Co., N. H.; Sample Pages of Dayle's New Check-List; 6 short articles. April, '89.
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- No. 45.—Michigan Notes (4½ pages); Arkansas Notes; Goldfinch in Confinement; Burrowing Owl; Our Reply; Gleanings from Correspondents; 5 short articles. July, '89.
- No. 46.—Notes from Hillsborough Co., Florida (2 pages); Shore Lark in Canada; Can Quails be Domesticated?; Red-tailed Hawk; Untimely End of a Set of Brown-headed Nuthatch Eggs; Broad-winged Hawk and Black-capped Chickadee; Gleanings from Correspondents; Wilson Ornithological Chapter of the Agassiz Association; 4 short articles. Aug., '89.
- No. 47.—"Old Abe" Jr.; A Day's Collecting Trip; Bell's Vireo; Black Tern; Yellow-rumped Warbler; An Automatic Blower; Flight of Ducks; White-eyed or Florida Towhee; Pygmy Owl; Cooper's Hawk; 10 short articles. Sept., '89.
- No. 48.—Winter Birds of Kalamazoo County, Mich. (2½ pages); American Long-eared

- Owl; Wood Ibis in Illinois; Birds of Bertie Co., N. C.; Collecting in Western Florida; A White Sparrow; Nests and Eggs of North American Birds; Black Tern; 8 short articles.
- No. 49.—Thick-billed Grebe; Birds' Nests; Yellow-billed Cuckoo; Mechanical Egg Drill; Birds Moving their eggs; Cardinal Grosbeak; To Pack Eggs for Transportation; Disposal of Duplicate Specimens; Complete List of the Birds of North America arranged according to the A. O. U. Check-List (6 pages); 5 short articles. Nov., '89.
- No. 50.—Birds of Niagara County, N. Y.; Shore Lark; Incidents in Bird Life; Gleanings from our Correspondence; Marsh Hawk; Yellow-headed Blackbird; Northern Phalarope; 13 short articles. Dec., '89.
- VOLUME VII.
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- No. 52.—Breeding of the Brown-headed Nuthatch; Prairie Horned Lark; Collecting Experience; Snowy Owl; Nest of the Texan Bobwhite; Unusual Nesting of the Downy Woodpecker; Evening Grosbeak; Blue-Gray Gnatcatcher and Tufted Tit; 6 short articles. Feb.
- No. 53.—Summer Residents of Buena Vista County, Iowa; In the Woods of Florida; Birds of Mackinac Island, Mich.; Among the Gulls on Isle Royale; Sandhill Crane; Evening Grosbeak; Ruby-crowned Kinglet; Cactus Wren; Screech Owl in Captivity; Taking Birds' Nests; 11 short articles. March, '90.
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- No. 55.—Do Birds Mate More than Once?; Habits of the Evening Grosbeak; Pileated Woodpecker in Florida; Bird Protection; Chinese or Mongolian Pheasant in Oregon; Prairie Warbler; Winter Birds in Spring; A Valuable Work; Dayle's New Work on Taxidermy; 12 short articles. May, '90.
- No. 56.—Nesting habits of the American Oystercatcher; Prairie Horned Lark; Saw-Whet or Acadian Owl; Pine Warbler; Bluebird; Albinos; Pileated Woodpecker in Mahoning County, Ohio; Belligerent Neighbors; Recording the number of Birds Observed; Book Review; Prospectus of the Worcester Natural History Camp (4½ pages); 12 short articles. June.
- No. 57.—American Crossbill; Crested Grebe; Voracious Mountain Trout; Yellow-billed Cuckoo; Long-tailed Chickadee; Rough-winged Swallow; Great Horned Owl; Some Unusual Happenings; Pallas' Cormorant; Eggs of Audubon's Warbler; 12 short articles.
- No. 58.—The *Caprimulgidae* in Arkansas; White-bellied Nuthatch; Strange Co-habitation; Variation in the Eggs of *Habia uborici-ana*; King Rail in Minnesota; 8 short articles. Aug., '90.
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- No. 60.—The Use of the Camera in the Field. A study of nests (6½ pages, illustrated with 4 photo engravings); The Flathead (Montana) Field; The Owls of San Bernardino Valley; A Collecting Adventure; The Ruby-throated Hummingbird; Ornithologists at Indianapolis; The Burrowing Owl; After "Gators' Eggs;" Notes from Northern Minnesota. Oct., '90.

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**Plymouth Albums, 31 Views.** 25 cents.

Any of the above books will make handsome Christmas and Birthday presents, and will be mailed postpaid on receipt of price.

We have sent samples to the editor of this paper who will vouch for their excellence.

Agents wanted.

**A. S. BURBANK,**

Pilgrim Bookstore, Plymouth, Mass.

# SATIN SPAR JEWELRY.

The material from which this jewelry is manufactured is a very beautiful, fibrous, white, almost translucent mineral having a pearl or satin-like lustre, from England. We will mail a fine sample in the rough for for 5 cts.

The jewelry is all made from choice selected specimens and is cut and polished by experienced workmen. Nothing has been sold during the past few years, in the jewelry line, that has created the "craze" that can be credited satin spar. At Niagara Falls, enterprising dealers sell it to the credulous tourists as coming from that immediate vicinity (from Table Rock in particular.)

It is sold under various names, such as "Niagara Falls Spar," "Moonstone," "Mineral Pearls," "Congealed Spray" (whew!), etc.

The mountings are strong and durable and of fine rolled plate.

## Price List.

No.		EACH.			
1.	Scarf or Lace Pin, round.....	\$ .25	22.	Charms " " " .....	.50
2.	" " " " oblong.....	.25	23.	" barrel.....	.50
3.	" " " " bell.....	.25	24.	Lady's Fob Chains.....	1.00
4.	" " " " barrel.....	.25	25.	" " " fancy.....	2.00
5.	" " " " acorn.....	.25	26.	Necklaces.....	2.00
6.	" " " " containing views.....	.50	27.	" " fancy.....	3.00
7.	" " " " bug.....	.75	28.	" " extra.....	3.50
8.	" " " " eagles claw.....	.75	29.	" " on string with cross, graduated.....	.75
9.	Double Pins connected by chain.....	1.00	30.	" " no cross, graduated.....	.50
10.	Brooch, with narrow band and pendant.....	2.00	31.	Bracelets, 6 bangles.....	.60
11.	" " " " ".....	1.25	32.	" " 13 ".....	1.00
12.	" " plain bars, assorted patterns.....	.75	33.	" " 14 ".....	1.50
13.	" " four bangles, society pin style.....	.70	34.	" " on wire.....	1.50
14.	" " five " " ".....	.60	35.	" " spring.....	1.50
15.	" " six " " ".....	.70	36.	" " extra.....	2.50
16.	" " four " " plated bar.....	.75	37.	Rosary.....	4.00
17.	" " four " " ".....	1.25	38.	Sleeve Buttons, assorted patterns.....	.75
18.	" " four " " chain and pendants.....	2.00	39.	" " with narrow bands.....	1.25
19.	Glove Buttoners.....	.75	40.	Crosses, assorted patterns, large.....	.50
20.	Compass Charms.....	.75	41.	" " " small.....	.25
21.	" " with narrow band.....	1.05	42.	Ear Drops " ".....	.50
			43.	Jersey Pins.....	1.25

We are constantly adding new designs.

## IMPORTANT!

We have just been appointed SPECIAL WHOLESALE AGENT for Spar goods by the manufactures, and we desire at once to obtain an agent at every Postoffice in the U. S., to handle them. Any wide-awake boy or girl can make a number of dollars between now and the holidays, selling the scarf or lace pins alone.

During the past season we retailed from our stores over 1,000 of these pins. The ball style at 25c and the bells and acorns at 35c each. In other localities we have known them to sell at from 50c to \$1.00 each and we think our agents will have no trouble in retailing them at 35c.

For 25c we will send by return mail a sample scarf or lace pin, a sample of the spar in its natural state and terms to agents. For \$2.00 we will send one dozen choice assorted, on which you can make a nice profit by selling to your friends. Any person can make from \$5.00 to \$25.00 between now and the Holidays, without any effort whatever, by simply displaying a few samples and informing their friends that they have duplicates for sale.

During the past season we have found the following to be the best sellers:

Scarf or lace pins 3 styles @ 25c.....	\$ .75
Brooch, 4 bangles.....	.50
Double pins connected with chain.....	1.00
Queen chain.....	1.00
Victoria chain.....	2.50
Necklace.....	1.00
Bracelet.....	.60
Ear drops.....	.50

For \$5.00 we will send by Registered Mail securely packed in a wooden box, a sample of each the articles named above and give you the agency for your locality. We will appoint only one agent in a town of 1,000 or less inhabitants and while working for our interests will allow no other agent working for us to sell in their territory. To especially active agents, Jewelers and dealers in Fancy Goods we will give exclusive sale in much larger towns.

**FRANK H. LATTIN, ALBION, N. Y.**

# For the Holidays

We have just issued a large catalogue containing over **200 Illustrations** of the bargains we are offering in fancy goods, useful articles, automatic toys, novelties, etc., etc., recently purchased and imported for the holiday trade.

We desire to place our catalogue and samples of our goods **AT ONCE** in the hands of every reader of the **OOLOGIST**, within the next 30 days, in order to do this we make the following

## UNPARALLELED OFFER.

To every reader of the **OOLOGIST** sending us **15 Cents** in stamps or otherwise, before Jan. 1, 1891 and stating they saw the advertisement in the **OOLOGIST** we will send the following articles, viz.:

Our New Catalogue.....	\$ .02
Large Hand-book on the uses of tissue for fancy work.....	.10
A Mexican Resurrection Plant....	.10
Joker's Photo Camera.....	.25
2 Japanese Napkins .....	.05
1 Japanese Envelope.....	.02
1 Leaf from Japanese Book.....	.02
1 Pkg. Scrap Pictures.....	.10
10 Varieties Foreign Stamps.....	.05
A coupon entitling you to 25c worth of anything we advertise, or an order of \$1.00 or over.....	.25

\$ .96

We will send the entire package by return mail all charges paid

## ONLY 15 CENTS.

Catalogue and coupon good on a \$1.00 order for 25c worth of goods will be sent to any address for stamp; or for only 20c we will send you an assorted package of novelties and fancy articles, the odds and ends left from former lots of which we have not enough left to catalogue. The package cost us over the amount it will cost you, we purchasing the goods in large quantities, and at lowest wholesale rates. Address

## THE CURIO NOVELTY CO.

GAINES, ORLEANS CO., N. Y.

\*\*As to our reliability would refer you to the P. M. or any one at our P. O. or to the Publisher of the **OOLOGIST**.

## IMPORTED JAPANESE

AND INDIAN SILK WORM EGGS FOR SEED.

In Silk culture. Different species, also the celebrated Madras Silk Cocoons warranted to be raised successfully in this country. Directions given how to raise them profitably. Prices low.

PROF. CARL BRAUN,

NATURALIST,

BANGOR, - - MAINE.

## "Experimental Electricity,"

BY EDWARD TREVERT.

It will give practical information upon the following subjects: Some Easy Experiments in Electricity and Magnetism. How to Make Electric Batteries, a Galvanometer, an Induction Coil, an Electric Bell, a Magneto Machine, a Telegraph Instrument, an Electric Motor, a Dynamo, Electric Gas Lighting and Bell Fitting. Some practical directions for amateurs. Some information in regard to Electric Lamps. 176 Pages, 100 Illustrations. Just the book for amateurs. Price, cloth bound, \$1. Send money by Registered letter or P. O. money order. Send for catalogue.

B. F. EVANS, Madison, Wis.

## WM. G. SMITH,

-COLLECTOR OF-

Birds, Mammals and Eggs,  
LOVELAND, COLORADO.

I make a specialty of mailing birds same day as skinned, or sent in the flesh after subjecting them to a preservative preparation. Enclose stamp for Price List.

A REMARKABLE BOOK! A BOOK FOR THE TIMES!

## Millennial Dawn.

VOL I.—"THE PLAN OF THE AGES."

The above named book of 350 pages is one of the grandest books on the Bible ever written. It is intended for Skeptic as well as Christian and should be read by one and all. It is specially designed to make plain the Divine Plan, and commences at the beginning of the subject by establishing the faith of the reader in God and in the Bible as His revelation, and proceeds to trace the glorious plan therein presented in such a manner as to command the attention of every honest thinker. The plan presented is indeed glorious and the author claims it to perfectly harmonize every part of the Sacred Word, a thing which no other book ever dared claim.

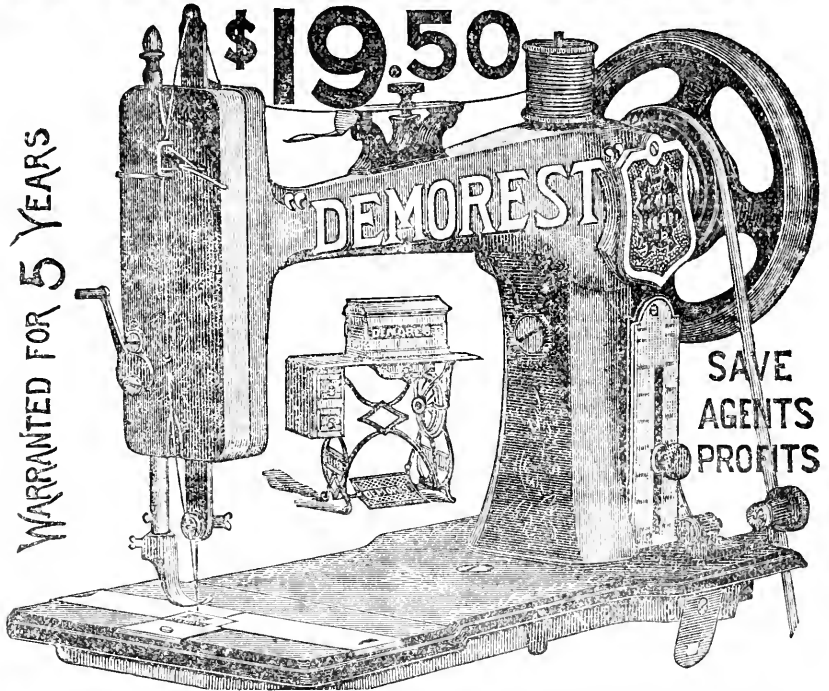
It most assuredly opens up the Word and magnifies our faith in a way so grand and glorious, yet so reasonable and scriptural, as to make it of special interest to the earnest seeker after TRUTH.

Being very desirous that everyone may have a chance of reading it, I make the following offer: To ANYONE who will PROMISE a CAREFUL READING and to return it, I will loan a copy FREE of all charges. Or will send you a copy for your own, in paper binding, for 25 cents.

Sincerely Yours,  
CHAS. H. DICKINSON,  
Sharon, Wisconsin

# A \$55 MACHINE FOR \$19.50

WARRANTED FOR 5 YEARS



SAVE AGENTS PROFITS

**YES, THIS IS TRUE:** WE ARE SELLING *The Demorest Sewing Machine*, with three drawers, drop leaf and cover and full set of attachments, for \$19.50 cash. Do you ask how we can do this? *Because we sell direct to you for \$19.50 cash*, while the other companies sell to their Agents for \$19.50; so you see we get as much as they do, but *you save \$35.50* by skipping the middlemen and sending to us. We give a five years guarantee the same as other companies. In three years we have sold upwards of fifty thousand of these machines. Write us for Catalogue showing different styles, and testimonials of those using the Machine.

**DEMOREST FASHION & SEWING MACHINE CO.,**

USE MME. DEMOREST PATTERNS.

17 East 14th Street, New York, N. Y.



Wood Engraving  
—FOR—  
**NATURALISTS**  
AND OTHERS.  
GOOD WORK,  
LOWEST PRICES.  
*Correspondence Solicited*  
H. A. CARHART,  
d yr Syracuse, N. Y.

**COINS, STAMPS CUR O.**

Large well illustrated 48p book 5c.

**W. F. GREANY,**

827 Brannan St., San Francisco, Cal.

# The Oölogist For 1891.

The OOLOGIST is without a question the most popular and instructive magazine, devoted to Birds, their Nests and Eggs, ever published, and while of special value to the Oologist and Ornithologist, its publisher is not alone in his belief that Teachers, Scientists, Naturalists and curiosity collectors in all departments will find the OOLOGIST not only worthy of their attention, but of their *subscription*. On January 1, 1891, the OOLOGIST will enter its eighth volume, and it will be the aim of its publisher, with the aid of its subscribers, to make it of greater value than any preceding one. Each number for '91 will contain twenty pages (16 and a cover) and will be promptly and regularly issued the first week of each month. The OOLOGIST for 1891 will be sent post-paid to any part of the world

## FOR 50 CENTS.

Every subscriber received for '91, after Nov. 15, 1890, will be mailed a card composed of two Coupons one of which will entitle the person addressed, to a free Exchange Notice, of 25 words in the OOLOGIST if used within one year from date. The second coupon will be accepted by the publisher of the OOLOGIST from the person addressed, in payment for or towards anything he offers for sale, to the amount of 25c providing the goods ordered amount to not less than \$1.25. This coupon is just the same as 25c in cash to you if you should want to purchase anything of us to the amount of \$1.25, during the year.

Remember *every* subscriber received for the OOLOGIST after Nov. 15 1890 will receive FOR ONLY 50 CENTS the following:

The OOLOGIST for '91 .....	\$ .50
Coupon for an Exchange Notice.....	.25
“ “ 25c on a \$1.25 order.....	.25
	\$1.00

*Every* subscriber received after the above date will be mailed the card bearing the two coupons, regardless as to whether the subscription is sent us direct or through an agent or whether it is a cash or exchange one or whether obtained through some future inducement we make.

Address THE OOLOGIST, Albion, N. Y.

### Collectors, Attention!

Live Cocoons of the largest Moth in the world, *Attacus Atlas*, \$2 per pair, male and female span 10in. Every collector of curios wants them for his cabinet. Now is your time to procure a real article of beauty. Send money and they will be sent to you postpaid and securely packed. They are going very fast.

PROF. CARL BRAUN, Naturalist,  
BANGOR, MAINE.

**TELEPHONES** for private lines. Sold out right. Circulars free. Address, HERBERT TELEPHONE CO., 132 W. Van Buren St., Chicago, Ill. Circulars free. Agents wanted.

**How To Build Houses.** A book giving plans and specifications for 21 houses of all sizes, from two rooms up. Sent post-paid on receipt of 25 cents. Address, CHICAGO BUSINESS RECORD, 132 W. Van Buren St., Chicago, Ill.

# THE CIRCULATION OF THE OOLOGIST.

The 2,500 October OOLOGISTS were disposed of as follows:  
To actual subscribers:

Alabama.....	8	New Jersey.....	64
Alaska.....	1	New Mexico.....	1
Arizona.....	1	New York.....	
Arkansas.....	3	Buffalo.....	15
California.....		New York City.....	30
Los Angeles.....	14	Orleans County.....	28
Other Offices.....	83	Rochester.....	10
	<u>97</u>	Other Offices.....	242
Colorado.....	21		<u>325</u>
Connecticut.....	71	North Carolina.....	18
Delaware.....	10	North Dakota.....	9
District of Columbia.....	12	Ohio.....	
Florida.....	17	Cleveland.....	10
Georgia.....	28	Other Offices.....	84
Idaho.....	1		<u>94</u>
Illinois.....		Oregon.....	10
Chicago.....	25	Pennsylvania.....	
Other Offices.....	137	Philadelphia.....	45
	<u>162</u>	Other Offices.....	92
Indiana.....	61		<u>137</u>
Indian Territory.....	1	Rhode Island.....	11
Iowa.....		South Carolina.....	12
Des Moines.....	17	South Dakota.....	4
Other Offices.....	100	Tennessee.....	
	<u>117</u>	Memphis.....	10
Kansas.....	48	Nashville.....	14
Kentucky.....	26	Other Offices.....	21
Louisiana.....	3		<u>45</u>
Maine.....	55	Texas.....	
Maryland.....		Austin.....	11
Baltimore.....	21	Other Offices.....	43
Other Offices.....	9		<u>54</u>
	<u>30</u>	Utah.....	4
Massachusetts.....	96	Vermont.....	
Michigan.....		St. Johnsbury.....	10
Detroit.....	10	Other Offices.....	49
Kalamazoo.....	13		<u>59</u>
Other Offices.....	89	Virginia.....	35
	<u>112</u>	Washington.....	12
Minnesota.....		West Virginia.....	10
Minneapolis.....	15	Wisconsin.....	71
St. Paul.....	14	Wyoming.....	2
Other Offices.....	34	Dominion of Canada.....	
	<u>63</u>	British Columbia.....	1
Mississippi.....	21	Manitoba.....	1
Missouri.....		New Brunswick.....	1
Kansas City.....	11	Nova Scotia.....	1
Other Offices.....	35	Ontario.....	61
	<u>46</u>	Quebec.....	9
Montana.....	5		<u>74</u>
Nebraska.....	39	Foreign.....	1
Nevada.....	4	Total number of copies paid for.....	2234
New Hampshire.....	23		

Number of copies placed on file to supply future demands and for binding purposes, 100  
Sample copies sent to applicants, 166  
2500



# OÖLOGIST.

Monthly.

50c. per Year.



Vol. VII,

ALBION, N. Y., DEC., 1890.

No. 12

## Exchanges and Wants.

Brief special announcements, "Wants," "Exchanges" inserted in this department for 25c per 25 words. Notices over 25 words, charged at the rate of one-half cent per word. No notice inserted for less than 25c. Notices which are merely indirect methods of soliciting cash purchasers cannot be admitted to these columns under any circumstances. Terms, cash with order.

I received a large number of good offers from my X. in Sept. OÖLOGIST. I think it was the best investment I ever made. ROBERT A. CAMPBELL, Hanover, N. H.

"I have received 15 letters and cards in one day in answer to my notice in the OÖLOGIST." N. BRADT, Eagle, New York.

"My exchange business is big. Have exchanged about \$100 worth of specimens." W. E. SNYDER, Beaver, Ohio, Wis.

I received a good many answers from my last exchange notice in your paper and am going to try another. A. L. CHILDRESS, Decherd, Tennessee.



CAUSE.—A single notice or adv. in the OÖLOGIST costing from 25 to 50 cents.

I HAVE sets with data only to exchange for same. FRANK CRAIG, No. 622 23rd street, San Francisco, Cal.

FOR EXCHANGE.—First-class eggs in sets with data of 696a, for other first-class eggs in sets with data. Send your list stating number of eggs in sets. WARD AMES, JR., 214 1st Ave., East.

I HAVE Wood's Nat. His., Cloth and gilt binding, 700 pages, well illustrated, for sets. Make offer. For every set with data, I will give 5 fine Spec. of mistletoe or sweet Gumballs. WALTER BRADFORD, Mayville, Ky.

TO EXCHANGE.—1 Dwarf Thrush (worth 2.00) 1 of 430, 2 of 431, 2 of 27, 6 of 11; also these foreign eggs: White-throat, Red-backed Shrike, Red-leg Partridge, Tern and Moor hen; all first-class; for best offer of fire-arms of any description; list price of eggs by 1890 catalogue \$4.50. I use Ridgway's nomenclature. Address J. A. STEWART, Covington, Ga.

DATA BOOK.—600 pages, bound in boards and leather. Will exchange for eggs or works on Ornithology and Oology. Write for particulars to B. H. HOAG, Stephentown, Rensselaer Co., New York.

A FERRET is wanted by JOHN A. LOSEE, Richfield Springs, N. Y.

TO EXCHANGE.—Skins, Supplies, Books (Novels), etc., for skins, eggs, etc. Letters answered. W. F. DEALING, 1403 21 Av. N., Minneapolis, Minn.

WANTED.—Any eggs numbered from 1 to 40 A. O. U. List except 4, 6, 13, 30. What have you to offer. W. B. PORTER, 224 So. Oakley Ave., Chicago, Ills.

TO EXCHANGE.—A Juno Safety Bicycle, in good condition, for a well Bred Bird dog; must be Thoroughly Broken. A Pointer preferred. Write for Particulars. E. P. PECK, Clifton Springs, N. Y.

FOR EXCHANGE.—Michigan birds eggs for Southern or Western eggs, also pair climbers and large engravings to exchange for eggs—one "The Russian Wedding Feast." MRS. A. SIMMONS, Richmond, Michigan.

TO EXCHANGE.—A fine set 1/2 Bald Eagle's eggs with data, for a breech loading shot-gun in good order. Will accept best offer. Give accurate description. M. C. WHITE, Mathews, C. H. Va.

WILL EXCHANGE.—Stuffed Eagles, Snowy Owls, Great Grey Owl, Peacocks, Deer Head, Grandfather's Clock, Flint Lock Pistols, and War relics.—Wanted, Cuckoo Clock, Wolf Robes, Quackenbush rifle. S. O. BRUSH, Milton, Vt.

BOUND VOLS. II, III, IV, V, of Harpers Young People, and Vol. XXI Wide Awake for other books, ornithological books preferred, should like Cones' Key. F. A. GREGORY, 1214 N. Court St., Rockford, Ills.

TO EXCHANGE.—Coins, Books, Curios, and Indian relics, for other Indian relics and Curios, pipes preferred, fine horn rack for safety bicycle or gun. Address with stamps, I. J. HEAD, Lock Box 15, Centralia Mo.

WANTED.—A 48 in. wheel, Safety or Victor Jr. preferred, other make also accepted. Can offer finely prepared skins and eggs in sets. Write for list also stating condition of wheel, also skins to exchange for same of other localities. Write soon sending list. All letters answered. A. W. NOLTE, W. 16th st., Los Angeles, Cal.

WANTED.—To exchange a Compound Microscope, magnifies 2400 times, one prepared object and two glass slips, the whole packed in a polished mahogany case; also 100 side blown eggs, for first-class eggs with full data; singles preferred. DIAL, SWEET, Box 118, Strong, Maine.

**EXCHANGES AND WANTS, Continued.**

TO EXCHANGE.—The following singles: 366, 375a, 385, 233, 713, 622b, 565a, 413, 535, 591b, 340, worth \$3.00, for climbing irons, eggs or other offers. RAY L. WILBUR, Riverside, California.

TO EXCHANGE.—A collection of 72 different first class eggs worth \$8. 10, also No's 497, 523, 546, 382 A, O. U. 2nd class, for sets. Send offer. S. CLARCO'SCHL, 5423 Indiana Av., Chicago, Ills.

NOTICE!—Have 84 species, 125 eggs, sets and singles; climbers and Star bicycle to exchange for, camera, type-writer or guitar, or will sell. Make offers. GREEN CLAY, Richmond, Ky.

WANTED.—A hand printing press, can offer Birds Eggs, Shells, scientific papers for same. State size of chase and price in Exchange All letters answered. E. RAUBE, Giddings, Texas.

I HAVE ONE Shadow Album, \$66, in Confederate Money and six numbers of Treasure Trove. Will exchange for birds eggs. CLARENCE PARCHMAN, Okolona, Miss.

FOSSILS TO EXCHANGE.—Spirifer Whitneyi, Strophodonta Reversa, Orthis Iowensis, and many others for minerals, fossil, and curios; 25 per cent. off for cash from exchange list. HERBERT E. BROCK, Box 86, Mason City, Iowa.

BIRDS' EGGS, Skins, Shells, Minerals, Indian Relics, Coins, Stamps, Confederate Money, Curiosities, etc., to exchange for same. Send lists and receive mine in return. E. M. HAIGHT, Box 24, Riverside, Calif.

TO EXCHANGE.—I have a pair of tree climbers and straps in good condition, have never been used, which I will exchange for the best offer of Water or Shore bird eggs in complete sets and datas. All letters answered. ROY RUSSELL, Kokomo, Ind.

WILL EXCHANGE.—OOLOGIST of 1889 bound, of 1890 unbound and a 22-cal. pearl handled, revolver, either together or separately, for the best offer in stamps. WILLIAM S. HUBBELL, JR., 369 Pearl St., Buffalo, New York.

WANTED.—Fine Indian relics. Will exchange for same 1000 rare U. S. Stamps, 5000 Foreign, 1000 copies of "Golden Days," "Good News," "Outing," Twenty-five dollars' worth of books, Confederate Money. For first trade I will give a rare present. JAMES ATHERTON, Mokenca, Ills.

I HAVE FOR EXCHANGE in first-class sets, with full data, Bobolink, Purple Martin, Swamp Sparrow and Cooper's Hawk; also 50 varieties of single eggs. Also Bird skins and five Cseropia Moth Cocoons for exchange. I also have Blue Jays, single or in pairs, Meadow Lark and female Butter Ball ducks mounted in first-class shape on base and perches, which I will exchange for first-class eggs in original sets with full data. Should you wish any of the above offers, write for further information to E. G. TABOR, Meridian, N. Y.

I HAVE some foreign coins of the following dates for offers in firearms or cash: 1865, 1855, 1867, 1838, 1754, 1856, 1877, 1865, 1855, two without dates, two in time of King George. HARAL PACE, Covington, Ga.

I HAVE a large number of first-class singles to exchange for sets. Also eggs of my locality for others. W. B. PORTER, 224 So. Oakley Ave., Chicago, Ill.

PEOPLE'S ENCYCLOPEDIA and Grant's Members, new, sheep binding, for best offer first-class eggs in sets. Five '83 V nickles without cents, for best set of eggs offered. Send lists and get mine. W. L. MORSE, 706 Montgomery St., Syracuse, N. Y.

I HAVE one pair climbing irons, new, Vol. 62 Youth's Companion, single eggs and eggs in sets to exchange for first-class eggs in sets with data. JOHN OLDFIELD, Norton, Mass.

WANTED.—A few sets of the common Southern and Western varieties of Birds' Eggs, in exchange or for cash. Also desire to correspond with earnest and enthusiastic collectors of all sections. Send for list of sets. Address, WALTER F. WEBB, 18 Strathallan Park, Rochester, N. Y.

**BIRD SKINS.**

F. W. Cook, 3114 Pleasant Ave. S., Minneapolis, Minn.

**FOR SALE.** A collection of 75 varieties of single Eggs, including many rare ones, worth over \$10.00 at Catalogue rates, for \$5.00. J. C. WALTERS, Richmond, Ind.

2 Spec. of Natural History, 5 Rare Stamps and a Sample of an article useful to collectors, all for only 10 cts. H. H. ABEEL, 118 Main St., Poughkeepsie, N. Y.

**BEFORE YOU BUY YOUR X-MAS PRESENTS**

Send for a catalogue of Birds' Eggs and Stuffed Birds. Never before so low in prices. Large variety. Perfect Specimens, etc.

Those enclosing stamp will receive a catalogue.

JAMES P. BABBITT,  
Taunton, - - Mass.

**BIRDS' EGGS.**

30	kinds	Foreign	1.00	post-free
12	"	"	.50	" "
15	"	Am.	1.00	" "
100	"	"	5.00	" "

30 labeled kinds of woods 5 x 2½ x 1½ post-paid for 2.50.

All the above eggs are first-class.

F. T. CORLESS,  
Tillamook, - - Oregon.

**THE OSPREY NATURALISTS' DIRECTORY.**

Is now completed and on the market at 15c per copy. Every collector should have one; only 15c each. Address.

H. STANTON SAWYER, LETSON BALLIET,  
Garland, Maine. Des Moines, Iowa.

**BIRDS' EGGS, RARE AND BEAUTIFUL SETS, AT VERY LOW RATES.**

A NEW LOT JUST RECEIVED.

All parties desiring to add some rare sets to their collections, such as Sooty and Dusky Grouse, Greenland Ptarmigan, Black Merlin, Richardson's Merlin, Northern and Red Phalarope, Man-O-War Bird, Amer. Scoter, Gilded Flicker, and many other equally desirable species, send for price list. Satisfaction guaranteed. Address WALTER F. WEBB, 18 Strathallan Park, Rochester, N. Y.



# A Branch Store at Ann Arbor.

For the convenience of my western friends I have opened a specimen and supply store at No. 22 East Huron St., Ann Arbor, Mich.

Parties in the western states and in fact any but the extreme eastern and middle states can save fully two or more days time by having their orders filled from Ann Arbor instead of at our headquarters at Albion or of some eastern dealer, over 700 (seven hundred) miles east of Ann Arbor. On and after Jan. 1st, 1891, we shall have on hand at Ann Arbor, Mich., ready for immediate shipment, one of the largest stocks of Specimens, Curiosities, Supplies and Instruments in the United States west of our Albion, N. Y., headquarters. Our western patrons and parties in the habit of sending way east for their material, will please keep this in mind.

Faithfully yours, FRANK H. LATTIN.

## OLIVER DAVIE'S NEW WORK ON TAXIDERMY.

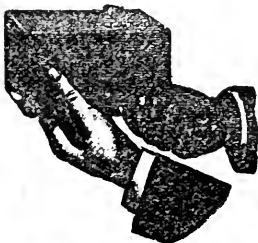
*See description on pages 94, 95 and 96 May Oologist, also letter on pages 224 and 225 November issue.*

This work will be published only on condition that there are 500 subscribers; also, only that number will be taken. If the requisite number are obtained the name of each will be published in the work. Write at once for subscription blank, proof pages of the illustrations and for full particulars address

**OLIVER DAVIE, 214 W. High Street, COLUMBUS, OHIO.**

\* \* To any reader of the OOLOGIST, who will write Mr. Davie for a blank and properly fill the same, stating to him that they subscribe for his work, through the recommendation of the publisher of the OOLOGIST, we will, if you are not more than pleased with the work when published, give you \$5.00 in cash for your copy and present you with a years subscription to the OOLOGIST, for your trouble.

# NEW KODAK CAMERAS



"You Press the Button

We do the Rest."

(OR YOU CAN DO IT YOURSELF)

Seven New Styles and Sizes,

ALL + LOADED + WITH

Transparent Films.

For Sale by all Photo. Stock Dealers.

Send for Catalogue.

**THE EASTMAN COMPANY, Rochester, N. Y.**

# AN X-MAS OFFER

We quote the following Liberal Discounts

## UNTIL CHRISTMAS.

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Razor-billed Auk	25	Hawk Owl	1 60	Scarlet Tanager	25
Glaucous Gull	85	Burrowing Owl	25	Summer Tanager	20
Ireland Gull	1 50	Yellow-billed Cuckoo	10	Purple Martin	15
Great Black-backed Gull	50	Belted Kingfisher	20	Cliff Swallow	04
American Herring Gull	25	Downy Woodpecker	20	Barn Swallow	05
Ring-billed Gull	30	Red-headed Woodpecker	08	Bank Swallow	04
Mew Gull	35	Red-bellied Woodpecker	30	Loggerhead Shrike	15
Laughing Gull	20	Golden-fronted "	75	White-rumped Shrike	08
Franklin's Gull	75	Flicker	03	Bell's Vireo	15
Gull-billed Tern	15	Red-shafted Flicker	10	Yellow Warbler	05
Caspian Tern	50	Nighthawk	40	American Red-start	15
Cook's Tern	40	Western Nighthawk	50	Mockingbird	05
Foster's Tern	15	Chimney Swift	15	Catbird	02
Common Tern	10	Scissor-tailed Flycatcher	10	Brown Thrasher	03
Arctic Tern	15	Kingbird	02	Texas Thrasher	20
Least Tern	08	Arkansas Kingbird	08	Californian Thrasher	25
Sooty Tern	35	Crested Flycatcher	12	Carolina Wren	15
Black Tern	12	Faerie	05	Bewick's Wren	50
Noddy	75	Wood Pewee	15	Vigors Wren	25
Black Skimmer	12	Acadian Flycatcher	20	Hair's Wren	06
Fulmar	75	Trail's Flycatcher	20	House Wren	06
Brandt's Cormorant	50	American Magpie	25	Western House Wren	06
Brown Pelican	25	Blue Jay	05	Long-billed Marsh Wren	06
Merganser	1 00	American Crow	05	Brown-headed Nuthatch	35
Florida Duck	2 00	Florida Crow	50	Tufted Titmouse	35
Blue-winged Teal	25	Cowbird	03	Wood Thrush	06
Barrow's Golden-eye	1 00	Dwarf Cowbird	20	American Robin	02
American Eider	25	Yellow-headed Blackbird	05	Bluebird	02
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Scaup Duck	75	Meadowlark	12		
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American Bittern	1 25	Hooded Oriole	50	Barbary Partridge	15
Least Bittern	20	Orchard Oriole	10	Mediterranean Gull	30
Louisiana Heron	15	Baltimore Oriole	10	Sheldrake	25
Yellow-cro'ed Night Heron	25	Bullock's Oriole	15	Swan	2 50
Limpkin	1 25	Brewer's Blackbird	05	Lesser Spotted Eagle	3 00
Sora	10	Bronzed Grackle	05	Lesser Kestrel	25
Florida Gallinule	12	House Finch	06	Great Crested Grebe	25
American Coot	10	American Goldfinch	08	Egyptian Goose	1 25
Red Phalarope	1 00	Arkansas Goldfinch	20		
Bob-white	10	Chestn't-collared Lo'gsp'r	75	NOVELTIES.	
Florida Bob-white	15	Grass Finch	05	Alligator	20
Texas Bob-white	10	W. Lark Sparrow	05	Turtle	10
Willow Ptarmigan	75	Gambel's Sparrow	25	Python	1 00
Prairie Hen	20	Chipping Sparrow	02	Shark	15
Wild Turkey	75	Field Sparrow	04	Hammerhead or Leopard Shark	15
Chachalaca	1 50	Song Sparrow	02	Egg of Skate	05
Sooty Grouse	1 75	Heermann's Song Sparrow	11	Devilfish	10
Mourning Dove	03	Swamp Sparrow	52	Egg Case of Periwinkle	20
White-winged Dove	30	Towhee	01	Pharaoh's Serpents' Eggs	10
Ground Dove	25	Spurred Towhee	25		
Cooper's Hawk	30	Californian Towhee	08		
Harris' Hawk	75	Cardinal	05		

Address, FRANK H. LATTIN, Albion, N. Y.

# THE OOLOGIST.

VOL. VII.

ALBION N. Y., DEC, 1890.

No. 12

## The Rusty Blackbird.

(*Scolecophagus carolinus.*)

Silent and un-noticed, clad in sombre dress, the Rusty Blackbirds pass us twice a year; once, northward-bound, early in the train of numberless winged travellers which yearly wing their way to northward breeding grounds,—these, before the cold blasts of March are hardly done, and still straggling by through the days of April; and again, southward-bound, 'mid falling leaves and hoar-frosts, tinted forests and crisp October mornings.

I said silent and un-noticed.— un-noticed because silent and unobtrusive, it quietly passes by, creating no disturbance to attract our attention, nor emitting any notes to draw our ear in its direction; but, unostentatiously, in large flocks, small flocks, and singly, they move by us unawares, stopping only in low and swampy places, and even when they are noticed, are seldom hailed as anything more than merely a "flock of blackbirds."

But what about these blackbirds? What if some blackbirds did fly north or fly south once? Or what if they did it twice a year? What of it? Nothing, only I thought that these un-noticed birds so seldom see their "name in print," that out of justice to them, I would be their advertising agent for once.

Well, as I have said, the Rusty Blackbirds are with us twice a year as migrants. It is in the autumn that the rust-color markings, from which this species takes its name, are most conspicuous, and it is then that it presents the appearance, most nearly, of a *rusty blackbird*. At this time, all the feathers of its glossy-black plumage are edged with this ferruginous setting, making the bird at once conspicuous and

easily identifiable when at not too great a distance.

As to size, the Rusty Blackbird is just about equal to the Red-wing,—or just a little larger, being about  $9\frac{1}{2}$  inches in length and about  $14\frac{1}{2}$  inches in extent.

A conspicuous mark of this species, aside from the markings of the plumage, is the milk-white iris.

The female has a pale stripe above the eye. She is slaty-brown above, and rusty and grayish mixed below. In the spring, the male has some of the feathers edged with rusty-brown, but the predominating glossy-back of the plumage out-does it, and renders it inconspicuous.

For some reason, I do not notice these birds very often in the spring, but it is during the chilling days of October, when chestnut-burrs have just dropped their tempting morsels, and robins are dividing themselves into squadrons and battalions for their forced march southward, that the Rusty Blackbirds force themselves upon my notice.

Some way, I always associate Rusty Blackbirds with frosty autumn mornings, falling leaves and hazy skies; and, likewise, hazy skies, falling leaves, and frosty mornings with Rusty Blackbirds.

I know not why these are always associated in my mind together, unless, may be, it is because my first acquaintance with the Rusty Blackbird was made on just such a frosty morning, 'mid falling leaves and 'neath a hazy, October sky.

That morning I shall not soon forget. It was October 21st,—yes, I know it was October 21st (would that I could remember historical dates and those of business transactions as well as those of my ornithological achievements.)

Langille most truly expressed my sentiments when he said, concerning himself, in "*Our Birds in their Haunts*"

that the making of the acquaintance of a bird for the first time gave him almost as much pleasure as though he had been the discoverer of that species.

Surely I find it so. The meeting, for the first time, of a looked-for species, is a red-letter day in my history,—a date to be remembered. Do I not remember distinctly the day I met my first Fox Sparrow? Was it not March 27th? And wasn't it April 7th when I found that Chewink, strayed into this northern district? And wasn't it just two days later, April 9th, when, in a lonely wooded wilderness, I came upon my first Hermit Thrush? Yes, I know the morning referred to was October 21st. No amount of forcible persuasiveness could make me believe it to be the 20th or the 22nd. *That* morning was October 21st.

But I am deviating. The morning in question found me mounted on my faithful, two-wheeled steed of steel and nickle,—my bicycle,—at 6 o'clock,—twenty-five miles from home, and facing a steady, although gentle breeze. Oh! what a morning that was. A stinging frost had forced its subtle influence into every nook and crevice of Mother Earth and sent the last painted leaf twirling to the ground. The roofs of farm-houses and their adjacent barns and sheds, were so many sheets of frosted writing-paper, on which I dare say, the fairies were tempted to enroll their names. And then the sun,—not many minutes up,—shining over all from a clear sky, made every frosted object truly beautiful. Meadows and pastures were vast, unbounded carpets of glittering whiteness, woven, "hit-and-miss," of frostiness and sunbeams. The mullein,—that despised and overlooked weed of the pasture and roadside,—was for once queen of all, for, with head aloft, and her large velvety leaves, deeply frosted, outstretched to receive the morning sun, she indeed excelled all other objects in beauty, and stood motionless as if anxious to show

to all the world the beauties of a frosted mullein-leaf. What wonder, then, that a breakfast-seeking goldfinch, undulating over the fence with his merry *tsee-te-day*, should stop just long enough to leave the print of his tiny feet upon her glittering mantle? But I am soaring.

It was cold that morning at 6 o'clock,—yes it *was* cold. With chattering teeth and quaking limbs, I pushed my wheel out of the drive-way of the old-fashioned farm-house of my uncle into the highway and headed my steed for home. Increasing my speed to a racing pitch, after about a mile of hard riding, I succeeded in driving the "shivers" from my body, became thoroughly warmed through and in keeping with the surrounding atmosphere, and settled down to a slow-and-easy gait to enjoy the richness of my ride. Oh, it was grand! The exceeding crispness of the air made the very act of breathing a luxury in itself. One could not but breathe full and long. Even now, as I write, I can almost feel my nostrils distended with one more draught of that frosty, morning air.

But those blackbirds,—I almost forget them. All the morning they were flying southward in flocks of a half-dozen or greater,—sent with one accord by this,—the first truly stinging hoarfrost of the fall. One flock would scarcely have passed overhead, before another could be seen coming in the distance,—and so, detachment by detachment, hundreds of Rusty Blackbirds were hastening to their winter-quarters, fully aroused to their sense of duty by this piercing October frost.

One lone individual came flying by himself (thus proving the truth of the saying,—"birds of a feather, flock together") as though he cared not for friend or travelling-companion.

Approaching, he alighted on the topmost twig of a large maple which stood at the intersection of another road, as though he were appointed sentinel to

guard the cross-roads; and, as I wheeled quietly by, he gave utterance to a subdued croak, as if to demand of me, the countersign.

Tonawanda Swamp is a large and extensive tract of some fifteen or twenty thousand acres of low, wet, marshy, swampy, boggy, peat-bottomed, mucky, wooded land, extending in an easterly and westerly direction for about twenty miles, and lying along the boundary line between Orleans and Genesee counties.

Its width varies at different points from one to three miles. This immense wilderness is six miles from Medina, lying due south,—six miles as the crow flies, or eleven miles as the wild duck flies,—for the wild duck follows the creek, which flows in letter S fashion from the swamp to Medina.

The main road leading into Medina from the south runs through this swamp at a point where its width is nearly two miles, and this stretch of road, bordered on either side by vast, unbroken forests, furnishes not only a pleasant ride, but, to anyone at all interested in natural history, an overflowing store-house of wonders.

I don't remember the time when I have passed over this two miles of road and through these two miles of wilderness without seeing something new in the bird line.

But I was going to say that my path homeward on this afore-mentioned morning lay through this swamp and over this identical strip of road spoken of.

As I entered the confines of the swamp,—what was that?

I never had seen one before, but I knew the party at sight, and a great achievement it was to record a Blue Jay in these parts,—for, although abundant almost everywhere in the United States, in this particular section of Western New York the Blue Jay is a negative quantity.

The next thing noticed after the sensation caused by the appearance of the Blue Jay had passed by (as had the Jay himself) was a rustle in the bushes,—and lo,—*here* were Rusty Blackbirds.

If there were flocks flying overhead in the open country, here in the swamp were whole droves of them,—if hundreds of them had been flying southward high in air outside the woods, here were thousands lingering within its swampy recesses.

The underbrush was thronged with them, and the sombre hue of their rusty plumage harmonized well with the dying leaves and tinted foliage on every hand,—fit symbols of the dying year. How appropriate these rusty markings at this season of the year.

I had thought, when I saw the numberless flocks of blackbirds flying overhead that morning, that their number was beyond estimation; but when I encountered this vast host in the swamp, what numbers could approximate the blackbirds that were southward-bound that day?

Surely, of all that year, October 21st. was the day for Rusty Blackbirds.

But I will desist, and give my readers no further pain.

I have led them in a round about way over the country,—through swamps and elsewhere. I have told them about a morning ride, a heavy frost, a great big swamp, and a mullein-stalk, and all this under the title of "*Rusty Blackbirds*," while a small portion of my article only has been in relation to my subject.

What a wandering, soaring article, and what a wandering, soaring writer! I fancy I hear the reader saying, All very well, but if we call the writer foolish, what shall we say of him who has been so imposed upon as to waste his time in reading this?

That's all. Good-by.

*Sceloporphagus carolinus* is advertised.

NEIL FRANKLIN POSSON,

Medina, N. Y.

P. S. Having severed my editorial connection with the OOLOGIST, I feel perfectly free to impose upon its readers with the foregoing manuscript  
N. F. P.

Noes from Ohio.

Our common winter residents, such as Slate-colored Juncos, Tree Sparrows, Fox Sparrows and Golden-crowned Kinglets, have been here in large numbers since the latter part of October.

At this date, Nov. 15th, Juncos and Tree Sparrows are unusually numerous.

While passing through the woods one can frequently hear the harsh notes of the Winter Wren, and the observer may now and then get a glimpse of his grotesque form as he passes some opening in brush pile or log-heap.

The casual observer would hardly believe such a large voice to come from such a small bird.

A Rough-legged Hawk is occasionally seen perched on the dead top of some tall tree, patiently awaiting an opportunity to pounce down upon some unsuspecting field-mouse.

The Rough-leg is one of the commonest of our large Hawks.

The migratory warblers that stop here during their fall migrations have nearly all departed for the sunny south.

A few straglers of *Dendroica coronata* may yet be seen.

Every large flock of Chickadees or Golden-crowned Kinglets that I have seen this fall has been accompanied by one American Brown Creeper; and only one.

I have rarely observed a flock of Chickadees or Kinglets in the fall or winter not accompanied by a single Creeper.

I have never seen a Creeper unaccompanied by other birds.

The result of my investigations may be due to the fact that the Creeper is not very common here.

What have others to say on the Creeper subject.

The Bobwhite which was nearly exterminated a few years ago by severe

winters has become quite common again, but will not remain so long if they continue to be hunted as they have been since Nov. 10th.

Although not common, the Northern Shrike is sometimes seen here.

I have known one of these birds to remain in the vicinity of a corn field for an entire day for the purpose of catching the mice rorted from the shocks by the huskers.

When captured the mice are impaled on some nearby thorn tree.

The American Crossbill and Snowflake, or White Snowbird as it is commonly called, are seen here during severe winters only.

The Prairie Horned Lark breeds here in considerable numbers, but the nests are rarely found.

While in a large woods, five miles west of this place, in the latter part of June, 1890, I saw several American Redstarts, and although I was not fortunate enough to find a nest, I am confident that they nest in that locality.

Five or six years ago the Rose-breasted Grosbeak was hardly known here.

It has been common for the last three summers—often nesting in shade and fruit trees in the vicinity of houses.

The Red-eyed Vireo nested here in increased numbers the past season.

I noted one pair of Yellow-breasted Chats in 1890.

Nov. 11th was remarkable for the large number of Wild Geese that passed over this section.

I observed over 400—more than I had seen for five years previous.

One flock contained about 250.

Of our common birds the Catbird has suffered more from the effect of the egg collecting fever that struck this locality about A. D. 1885 than any other.

As the Catbird was very common at that time, and the nests are rarely placed more than a few feet from the ground, the young collector could secure the eggs without much risk to

his neck, and consequently the cabinets of several collectors in this locality contained a well assorted collection of the eggs of this species—in some instances honored or dishonored by the names of certain birds that happened to be impressed on the collectors' vision as the rightful owner glided noisily from the opposite side of the nest ere her real identity could be established.

The Catbird, however, was not discouraged and is fast recovering from the blow.

Among my best finds for 1890 was a fine nest and set of eggs of the Ruby-throated Hummingbird.

The nest was built on the crotch of a drooping apple-tree branch in an orchard.

I also found a nest of the Cardinal Grosbeak containing two eggs.

Upon approaching the nest a short time after its discovery, I saw a snake about two feet long, coiled up therein.

I drove it out, but as was to be expected, the nest was abandoned by the birds.

The Cardinal has become rare here.

I can say and truthfully too, that a single copy of the OOLOGIST is worth double the yearly subscription price to the collector.

Every present subscriber should induce, at least, one friend to subscribe and thus double its present circulation.

When that has been done it would be a good plan for to increase the OOLOGIST in size by about one-half.

[If *each* of our present subscribers would send us a single new subscriber we would be able to double the present size of the OOLOGIST.--PUB.]

I think I had better quit writing before I depart any farther from the subject.

W. H. OLNEY,  
Poland, Ohio.

The Evening Grosbeak in N. H.

It was Thursday, May 1, 1890. My

school was to close the next day and I had nearly all my movables packed, preparatory to spending my vacation in Maine. My large gun was in the bottom of my trunk. My small gun was in an extension case, the pieces of the gun being carefully wrapped in paper. The shells were somewhere in the case, which was well filled and tightly strapped.

I arrived in front of the school building at just three minutes before one by the town clock. School was to begin at once. I heard a new and peculiar note. I soon discovered the author in a maple tree near by.

I hurriedly threw my armful of books to a scholar and asked him to watch the bird, while I ran to my room on the second floor of the hotel, about twenty rods distant. The contents of my extension case soon covered the floor. I seized a handful of shells and the three parts of my gun, which I put together while running back.

I had entirely forgotten my wanted dignity and was the object of several cutting remarks by the bystanders.

But what cared I? The bird was soon pointed out to me. He had flown to the other side of the road and was hopping from branch to branch in an old apple-tree. I made a lucky shot and the gasping, quivering form was soon in my hand. Too bad? Yes, but such work is necessary to an understanding of the science, and why should not the birds of the wood and air be subject to the wants of man as well as the barn yard fowl?

The bird proved to be an Evening Grosbeak. The first one I had ever seen alive. I was a few minutes late to school, but the scholars were interested in the specimen and I felt well repaid.

Is this the first instance of the occurrence of this bird in New Hampshire?

S. L. Crosby, a Bangor taxidermist, showed me last summer the skin of an Evening Grosbeak which he had taken

in the spring, the first one ever taken in Maine. Perhaps I have been equally successful in N. H.

A. B. CALL,  
Henniker, N. H.

“The California Partridge or Valley Quail.”

This beautiful bird (*Callipepla californica*) is the principal game bird of the Pacific coast, although the Mourning Dove is “peppered” at considerably by the young hunter. The male’s beautiful head and topknot distinguishes him from the female. The topknot, as far as my observation goes, consists of five black feathers, although some say that there are six. The bird is a fast flyer and runner, and one needs a good dog and a true eye to obtain a mess. The bird will not lay to a dog like the Bob White, but will fly at his approach. The quail is rarely seen except on the wing, especially in localities where they have been hunted. The bird generally rise out of a bush and sometimes may be nearly stepped upon before they fly. A dog is generally necessary as the birds are liable to fall in thick brush and are hard to find.

They generally feed upon plains or hill-sides where the brush is thick, and the seed they feed upon plentiful. In some parts of the state they are considered a pest, as they feed upon the grapes and destroy large quantities of them.

As a rule they retire to the woods or some thicket to roost. In the morning and evening is the best time to shoot them as they feed then.

They congregate in flocks of from 10 to 150, and even more at some times. They pair about March and generally begin to lay in April.

I have never been able to obtain but one set of their eggs. In company with a friend I was going along the side of a canon, when we flushed an old bird. Running to look I found a nest containing 14 eggs hid under long

grasses so as to completely cover the nest. The nest was a shallow hole, lined with leaves, feathers and coarse grasses. The eggs were in different states of incubation and differed also largely in the style of marking. They were principally blotches and specks of old gold on a creamy-white surface. I would be glad to hear from anybody regarding the number of feathers in a quail’s topknot.

RAY L. WILBUR,  
Riverside, Calif.

A Case for Instruments.

In the OOLOGIST for Aug. and Sept., 1888, J. H. F., Jr., gives a description for making a case for instruments which was very good. I have made a few changes in his plan and like the result better.

I happened to have a strip of black walnut  $2\frac{1}{4}$  inches wide,  $\frac{3}{4}$  in. thick, and several feet long (almost anyone will be able to procure a suitable piece.) From this I cut two pieces 6 inches long. One of these I planed down to a thickness of about  $\frac{1}{2}$  inch, slightly thicker in the center, having convex top, and rounded edges and corners. This for the cover.

Then cut places on the inside surfaces of these pieces as near the right shape of the instruments as possible, taking care to have them large enough. The pieces should now be sand-papered smooth all over.

Take two strips of velvet some what larger than the case and fasten them to the sides of the case in which the grooves are cut. For this I find strong flour-paste preferable to glue.

Now put the instrument in place and press the two pieces together, taking care to have the velvet smooth. Remove the instruments, place the two pieces together in their proper positions, weight them down and allow them to dry. Never leave the instru-



ments in the case while drying or they will rust very badly.

Now trim the velvet off close to the edges of the case, fasten the two pieces together with a pair of small hinges and a clasp or small hook.

The case may now be varnished or "oiled out." If "oiled out" the more it is rubbed with the hand when oiling the better it will appear, and it is usually necessary to give it a number of coats. For oiling I use boiled oil.

B. S. B.,  
Phelps, N. Y.

NOTE: The case I have described will just about hold the instruments for preparing fresh eggs, and it is well to have a similar case for instruments for preparing incubated ones. I find it more convenient to have the instruments thus divided.

#### Notes from Island Lake, Fla.

March 6th. Found my first nest of Loggerhead Shrike, containing five eggs; was in an orange tree and composed of twigs, straw, feathers, etc.; lined with palmetto fibres.

April 26th. Going through the woods and practicing with my climbing irons, I happened to find in a deserted flicker's nest containing two badly incubated Florida Screech Owl eggs.

April 29th. Took my first set of Flicker's. The nest was in a dead pine about fourteen feet from the ground, and contained four fresh eggs.

Continuing the hunt, I found in a dead pine about sixteen feet from the ground, my second set of Florida Screech Owl, containing two fresh eggs.

On the same day I found in an orange grove a Florida Grackle's nest, containing five fresh eggs.

May 1st. Found my first set of three of Anhinga eggs on an island in a pine tree fifty feet from the ground. Nest was composed of coarse twigs.

Then, walking along, I suddenly saw a Florida Towhee fly out of the bushes. Searching for the nest, I found it on the ground, composed of pine straw and dead palmetto leaves; lined with fine grass. It contained three badly incubated eggs.

May 6th. Took my third set of Florida Screech Owl. I also found a Florida Towhee's nest, containing two fresh eggs, in a small bush in a bay. Returning to the same place on the next day, I saw three eggs instead of two. Knowing the set to be incomplete, I left the eggs, and again returned on the 12th, but to my great disappointment the eggs had disappeared.

May 8th. Took my first set of Florida Night Hawk. These birds always lay two eggs on the bare ground.

May 9th. Found on an island my second and third nests of Anhinga. First contained one egg and one bird. Second contained four badly incubated eggs. Nests were composed of sticks; lined with green bay leaves.

May 24th. Found my first set of Chuck-Will's-Widow. The nest was on the ground; contained one rotten and one badly incubated egg.

NICKOLAS V. LINDEN.

#### A Bank Swallow Produces "An Egg Within An Egg."

On reading the article entitled "An Egg Within Two Eggs," it reminded me of an egg I found during the summer. It was a Bank Swallow's egg I was carrying in my hand, when accidentally I crushed it. On looking down I was surprised to find that I still had an egg. The shells were joined at the ends, but were separate everywhere else. My egg did not have any of the albumen between the shells, but was entirely dry.

GEO. P. SHEPHERD,  
Bangor, Me.

# THE OÖLOGIST

A MONTHLY MAGAZINE DEVOTED TO  
ORNITHOLOGY AND OÖLOGY.

FRANK H. LATTIN, ALBION, N. Y.

EDITOR AND PUBLISHER.

REIL F. POSSON, MEDINA, N. Y.

ASSOCIATE EDITOR.

Correspondence and items of interest to the student of Birds, their Nests and Eggs, solicited from all.

## TERMS OF SUBSCRIPTION.

Single Subscription, - - - - - 50c per annum.  
Sample Copies, - - - - - 7c each.

The above rates include payment of postage by us. Send stamp for Premium List.

All subscriptions must begin with either January or July issues.

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ALBION, Orleans Co., N. Y.

\* \* Articles, Items of Interest, and Queries for publication should be forwarded as early in the month as possible and can be mailed to either the publisher or the Associate Editor, as you may prefer.

IS CARRIED AT THE POST OFFICE AT ALBION, N. Y., AS SECOND-CLASS MATTER.

It is with much regret that we are obliged to inform the readers of THE OÖLOGIST that the Associate Editor severed his connection with our little monthly last September—we have been very tardy in making this announcement as we thought it barely possible Mr. P. might be either coaxed or driven into reconsidering his withdrawal and continuing with us for at least another year as the marked improvement in the OÖLOGIST during the past season has been largely due to Mr. Posson's efforts. During the summer months he was both Editor and Associate. In severing our connection with Mr. P. we lose a valuable co-helper and while it will be necessary for us with the co-operation of

THE OÖLOGIST's thousands of readers to place our "shoulders a little firmer to the wheel" in order to make the little monthly for '91 what it might have been with his assistance. While we are making this extra effort to make THE OÖLOGIST for '91 better and more interesting than any previous volume, we can congratulate our Friend Posson upon acquiring and faithfully performing the duties of a Government official which from a pecuniary stand-point must be fully as substantial as the honor and glory he obtained in his connection with us. Mr. Posson has agreed to keep "windward eye" on THE OÖLOGIST and to occasionally "help us out" (?).

## Nothing at All.

(A la "The Old Oaken Bucket.")

### I

How fresh in my thoughts are those days of  
collecting,  
Since in endless succession they return to my  
mind,  
How, through orchard and meadow, with shot-  
gun and egg-box,  
I searched every nook for the eggs I might  
find,  
And when, in my rambles through forest and  
thicket,  
I'd chance on a nest which my own I might  
call,  
How I'd rush to the spot, and—oh what disap-  
pointment  
To find that that nest contained nothing at all!  
Contained simply nothing,  
not a single thing in it, not even an egg-shell,—  
no, nothing at all.

### II

Then I'd gaze toward the tree-tops and mur-  
mur at fortune,  
And replace the cover on my egg-box of tin;  
And comfort my troubled and discouraged  
spirit  
With the sad consolation that "It might have  
been."  
Yes, I duly remember those deep disappoint-  
ments;  
And my hopes and ambitions almost instantly  
fall  
To the soles of my gaiters with each recollec-  
tion  
Of the many nests found that contained nothing  
at all.

The Hawk's nests, the  
Wren's nests, the nests of the Warblers, and  
the many odd nests that contained nothing at  
all.

### III

How fresh in my memory is that day in the  
summer,  
When a nest of the Cerulean Warbler I found;  
In the heart of a woodland, in a large, branch-  
ing oak-tree,

Near the end of a limb, fifty feet from the ground.  
The girth of the oak was something enormous.—  
Nor was the distance to climb so exceedingly small.  
And I came to the conclusion, as soon as I found it,  
That all my previous big climbs were just,—  
nothing at all.

My big climbs, my tall climbs, my climbs made with climbers,—in short, all my previous climbs, were just nothing at all.

## IV

There are few things accomplished without difficulty.—  
You'll find this the case in love as elsewhere,  
(For we all of us know of that romantic fable Of Pyramus and Thisbe,—that buxom young pair;  
And you'll distinctly remember,—for so runs the fable,—  
That they did all their kissing through a hole in the wall,—  
But I wish to remark that their great difficulty As compared with this climbing, was nothing at all.

The digging the hole, and the k's-ing done through it, may, both these combined, were but nothing at all.

## V

But with much difficult climbing, I succeeded in reaching  
The limb where the nest was.—at the risk of my life,  
And straightway proceeded to hagggle the limb out.  
With the sharpest-known blade of my dull-bladed knife.  
Then I drew the nest towards me with the greatest of caution,  
And just had my hands on the precious, round ball.  
When, *hang it,—confound it,—(excuse the expressions),—D'ceruled's nest contained*  
nothing at all.

Contained simply nothing, not a single thing in it, not even an egg-shell,—no, nothing at all.

## VI

I tell you in candor, my brother collectors,  
That this business we're up to, depends largely on chance;  
For the collector's experience is dreadful uncertain,  
And much of his experience is not all romance,—  
His looked-for achievements turn out to be nothing.—  
When he expects something great, he finds something small.—  
And how oft is it true when he thinks he's found something,  
Disappointed, he finds that it's nothing at all  
Just merely nothing,  
expressed by a cipher, in something this fashion.—0—just nothing at all.

## VII

Disappointment and sorrow is what we are doomed to,  
In this cold, cruel world where we take our abode;  
And we must not expect to find everything sunshine  
Nor travel without finding stones in the road.  
And now, my kind readers, I'll finish my ditty,—  
But first, if you'll allow me, your attention I'll call

To the fact that most fables end up with a moral,—  
If you ask me what mine is,—it's just nothing at all.

Not even a moral,  
and no point to my story, and the whole tale has amounted to nothing at all.

—Homo poeticus.

## Answers to Queries in Nov. Oologist.

First; as to whether a crow can talk if its tongue is not split.

There seems to be an idea, prevalent over much of the United States, that if a crow's tongue is split the bird will be enabled to talk. Common sense, however, ought to tell us that if a crow cannot talk without its tongue being split there is no use in splitting it. I believe no crow could ever be taught to speak as well as a parrot, but that they are able to speak many words is beyond question. I have been the owner of one talking crow, and have seen and heard another that could swear "like a pirate." And all this without any cutting of the tongue. This latter crow's taste ran to the mimicry of animal sounds, such as the cackling of hens, the barking of dogs, etc. I think it will be found that certain crows possess more talent for speaking words than others.

The bird whose notes are described as sounding like "Sow, sow your wheat, sibley, sibley sibley," is doubtless the White-throated Sparrow. In Bradford Torrey's charming book, "Birds in a Bush," a story is told of a farmer named Peverly who received an injunction to sow wheat from this same bird. The White-throat has acquired other names from its song. In the White Mountains, Torrey says it is called nightingale from its habit of singing late at night, and in other parts of New England it is called Peabodybird from a fancy that the bird says "pe-a-body" instead of "sibley" or "peverly." Wilson Flagg has also worded the song as: "All day whittling, whittling, whittling."

WILLARD N. CLUTE,  
Binghamton, N. Y.

D. A. Young, Washington Heights, Ills., reports unusually large flocks of blackbirds this fall.

C. B. Vandycok, Odin, Ills., writes: "In reply to the article in Nov. OOLOGIST headed 'An Ornithological Leech,' would say I vary in my opinion, as

most birds take a bath in the early morning. I think it more possible for the leech to have adhered to the bird's body while bathing as the Leech is a water insect and seldom, if ever, elsewhere."

Several correspondents have furnished us with notes relating to queries and articles in Nov. OOLOGIST, but from lack of space we can print only the ones of greatest interest and value.

Irvin Martin, Topeka, Kans., writes that while herding cattle early in August he observed an Albino Cowbird, and says:

"Its wings and neck were slightly tinged with brown, but the rest of its body was almost pure white,"

R. I. Root, Alton, Ills., writes: "A farmer, living about three miles from this city, shot and killed a male Bald Eagle on his place about two weeks ago. Owls are very plentiful around here this year and come into the city a good deal lately."

In most cases it is utterly impossible to name birds and eggs from the meagre and incomplete (often fanciful) descriptions furnished.

H. A. Dann, Cissna Park, Ills., sends us a list of the common birds of his locality. He also mentions of finding a House Wren's nest in the coupling of a freight-car and another in the nest of the Domestic Pigeon.

G. R. Palmer, Washington, Ga., says:

"Last season a gentleman was hunting near this place and saw a large bird (snow white) which he succeeded in shooting and skinning; he then gave it to me.

After examining the bird I found that it was a species of hawk.

As it is the only white hawk (albino) that I ever saw, thought it might be of interest to the readers of the OOLOGIST to hear about it."

Can some of our readers inform us the proper name for a game bird common on the plains of Texas and Kansas, known as the "Doe Bird." Our

correspondent thinks they are mere species of the Plover family.

I found two quails' nests Sept. 9th, about 10 ft. apart; thirteen eggs in each nest, nearly fresh. Is not this later than usual for nests?

W. L. ROWLEY,  
Lenox, Mich.

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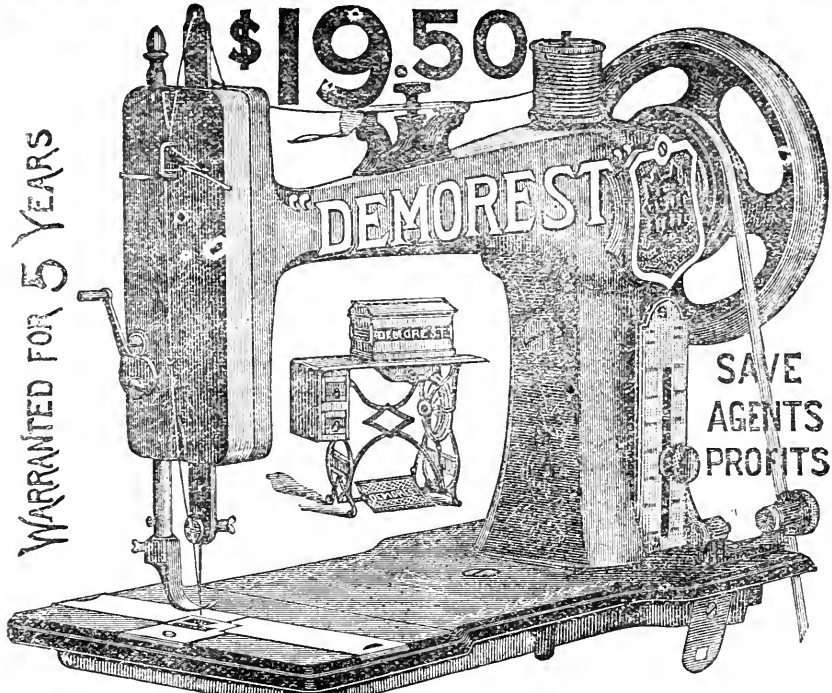
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