direction of the stockyards—but I have never happened to see any returning in the evening.

AGNES CHASE, Hyde Park, Chicago.

A Bob-White Tragedy.—The lower animals as well as man are subject to many ills and accidents. This is well illustrated by the number of incidents which are noted in natural history magazines. Instinct, it is true, has taught them much, yet nevertheless, they are constantly in danger of their lives.

One day last spring (April 20, 1902), while tramping the woods and fields north of Detroit, we saw an object hanging to a wire fence. Upon nearing it, it proved to be a female Bob-white (Colinus virginianus). The right foot had become tangled in a loop in the wire, and in trying to escape, the bird had disarticulated the leg bone from the hip. Here it must have hung for hours until death at last relieved it of its tortures. Who can imagine the pain which this creature must have suffered?

On a log a short way from the scene sat a male of this species, possibly its mate. Across the fields rang a gentle "Bob-white, a Bob-white," and as I paused I thought, "Ignorance is bliss."

A. W. BLAIN, Jr., Detroit, Mich.

PUBLICATIONS RECEIVED.

The Story of a Martin Colony.—By J. Warren Jacobs. This, the second of a series of illustrated pamphlets based on the author's researches and observations, the first being issued in 1898 under the title of **Oological Abnormalities**; is a record of the establishment and maintenance of a colony of four or five pairs of Purple Martins at the writer's home in Waynesburg, Green County, Penn., and of its subsequent increase until it numbered almost three hundred individuals at the end of the fourth season—more than could obtain lodging in the ninety-nine rooms of the three houses, over one hundred being compelled to roost in the branches of a nearby apple tree. The next three years witnessed an annual overflow, accommodated by new houses furnished and erected by his experienced hand in various parts of the town. If the colony had remained intact it would in all probability have numbered in the neighborhood of twelve hundred birds at the end of the seventh year.

After the introduction, the subtitles are as follows: Topographical Sketch and Existing Conditions of the Premises and Vincity, Establishment and Subsequent Scenes of the Colony, Return from

the South, Nest Building, Deposition and Number of Eggs, Incubation, The Growing Young and the Parent's Care, Something about their Food, Their Enemies, Causes of Death, etc. Off to the South, A Chapter on a Cabinet Series of Their Eggs, On the Construction of Houses.

The period of incubation is found to be from twelve to fifteen days, the female apparently attending to this duty exclusively, and twenty-four to twenty-eight days elapses before the young take flight. Seven years records show about eleven hundred and fifty eggs deposited and about eight hundred and fifty young reaching maturity, or rather, taking flight from home nest—almost 74 per cent! A remarkable showing for so large a colony of birds. It is interesting to note that in nearly every instance a wall of mud was built around the front of the entrance, on the inside. One would wish, perhaps, for more detailed plans and specifications for building their homes, but after all the main points appear to be compartments about 5 inches square and 6 inches high, with a single entrance two and a half inches square or two and three-quarters inches in diameter if round, and the whole elevated twelve or more feet above the ground on a pole or gas-pipe. Constant attention during the nesting period, with frequent use of the gun on the cats and sparrows, and an occasional appeal to the law when the disturbers belonged to that class termed "shooters" well named and far too common as well; was no small part of the price paid for this splendid mass of strenuous bird life. In this paper of twenty-four pages, Mr. Jacobs has, in a dignified manner, given the lie to the mere sentimentalist who would brand every egg collected as a sordid distroyer of life without a redeeming feature. It should be in the hands of every bird lover. F. L. B.

The Birds of North and Middle America.—By Robert Ridgway. Part II. Bull. No. 50, U. S. Nat. Mus., Washington, 1902.

This is the second of the eight volumes which we are promised, and fully maintains the high standard of the first volume. In the 834 pages of text the following families and number of species under each are fully treated: Tanagridæ, 112; Icteridæ, 111; Cœrebidæ, 29; Mniotiltidæ, 181. We await with great interest and some impatience the appearance of the other six parts, which are promised at the rate of two each year. L. J.

The Metallic Feathers from the Neck of the Domestic Pigeon. By R. M. Strong, Ph.D.

Reprint from the Biological Bulletin, Vol. III, Nos. 1 and 2, 1902.

A Case of Abnormal Plumage. By R. M. Strong, Ph.D.

Reprint from Biological Bulletin, Vol. III, No. 6, November, 1902.

The Development of Color in the Definitive Feather. By R. M. Strong, Ph.D.

From the Bulletin of the Museum of Comparative Zoology at Harvard College, Vol. XL. No. 3.

These three notable papers by Dr. Strong are results of his course of study in the graduate department of Harvard University. The last named paper summarizes the results of investigations on the development of color in feathers, and incidentally shows the extreme improbability of change of color in feathers without molt, except by the wearing away of the tips of feathers, which will simply eliminate that part of the feather with its color. This has been so carefully and thoroughly done that we may accept as final the conclusions reached. In fully grown feathers the change of the pattern of color by a redistribution of its pigment is not possible. L. J.

On the Classification of Certain Groups of Birds (Supersuborders: Archornithiformes; Dromæognathæ, Odontoholcae.) by R. W. Shufeldt.

Reprint from the American Naturalist, Vol. XXXVII, No. 433. January, 1903.

This paper is one of a series in which Dr. Shufeldt is giving the results of a great amount of study upon the osteology of birds, both extinct and living. The classification of extinct birds must necessarily be based upon the bones. Comparison with the skeletons of modern birds forms a basis for determining the relative position which those old forms should occupy in a general scheme of classification. Our thanks are due Dr. Shufeldt for the pains he has taken to bring order out of chaos where the ancient fossil forms are concerned, as well as for his contributions to modern classification based upon skeletal characters. L. J.

Amateur Sportsman, The, Vol. XXVII, Nos. 2, 3, 4.

American Ornithology, Vol. II, No. 12. Vol. III, Nos. 1, 2.

Bulletin Nos. 61, 62, Pennsylvania State College Agricultural Experiment Station.

Bird- Lore, Vol. V., No. 1.

Cassinia, No. VI, 1902.

Condor, The, Vol. V, No. 1.

Floral World, The, Vol. II, No. 3.

Journal of Applied Microscopy, Vol. V, No. 12. Vol. Vi, No. 1.

Journal of the Maine Ornithological Society, Vol. V., No. 1.

Maine Sportsman, Vol. X, Nos. 112, 113, 114

Ohio Naturalist, Vol. III, Nos. 1, 2.

Plant World, The, Vol. V, Nos. 8, 9, 10.

Warbler, The, Vol. I, No. 1.