could not prove it, for when we left we made a wide detour to avoid driving her from her emerging ducklings.

The next day during the first drops of a thunderstorm we hurried down for a look at the nest. This time the mother, instead of bursting out of the patch and flying off, flew low through the bushes, apparently dragging her wings. She might well use her best methods to decoy away intruders, for all but two of her eggs had now hatched. As we leaned eagerly over the nest a hatfull of downy yellow ducklings huddled back under the bushes. We had barely time to notice their brown eye streaks, ducklike bills, and streaked backs, when the storm burst, and descending rain and hail drove us back to the farmhouse.

Two days later, when we went down with the camera, only one egg and a few bits of shell remained in the nest. Our ducklings had gone! They had doubtless been spirited away to some safe harbor, but find them I could not. The parents—if it were they—I did see later, on the beach. Close to the water sat the duck, bill over back, apparently napping, while the drake kept watch. He lay at his ease on his side when discovered, but afterwards sat up on his feet like a more proper guardian, occasionally moving his handsome green head observantly. When his sleeping mate woke she flew off into the lake and he followed, after which they swam around side by side as serenely as if there had never been an Elsa and Lohengrin episode!

Washington, D. C., May 23, 1915.

A CONVENIENT COLLECTING GUN

By LOYE HOLMES MILLER

WITH ONE PHOTO

THE MAN with questionable standards in the matter of Sunday observance or of conformance to public park regulations is not the only man who may be interested in a collecting pistol. Despite the implied shadow upon his reputation, the writer asserts that he has found a collecting pistol an extremely useful weapon. The field trip of other than ornithological nature, where a twenty-eight inch gun barrel would be out of the question; the one hand-bag journey when nothing bigger than a holster gun can be crowded in; the country walk where one may be well within the law of both church and state, and yet not wish to be made conspicuous by a full-grown shot gun; the expedition after lizards;—these are all occasions upon which the collecting pistol has served the writer well. It has added many valuable specimens to his collection and has established one record for the region west of the Rockies.

My experiments began in the high school days, when an old Colt's navy revolver was bored out smoothe, carried to school in a clarinet case, and used on the way as a bird-call. The path to school was four miles long.

This rather heavy ordnance was later supplanted by an old Smith and Wesson pocket revolver with ten inches of brass tubing thrust down its throat and sweated in with soft solder. The most effective weapon, for its size, is the one now used and which forms the subject of this note.

A Colt, .38 calibre, Police Positive Special revolver forms the basis of the

arm. From this gun the rifled barrel was unscrewed and packed away in vaseline. An eight-inch, smoothe-bored, full-choked barrel of lighter weight was screwed into place. The very neat bit of work was done by Mr. W. H. Wilshire of Cline & Cline Co., Los Angeles, California. The result is a light and handy weapon, easily carried in a belt holster, which will chamber a special, long shell. The shells are loaded and reloaded indefinitely according to the following formula: Three grains Ballistite carefully measured, one felt wad 1/8-inch thick, nearly fill with shot and cover with card wad, dip in paraffin.

With the above charge of dust shot, the gun was targeted at forty feet from the muzzle (see fig. 76). The shot was remarkably uniformly distrib-

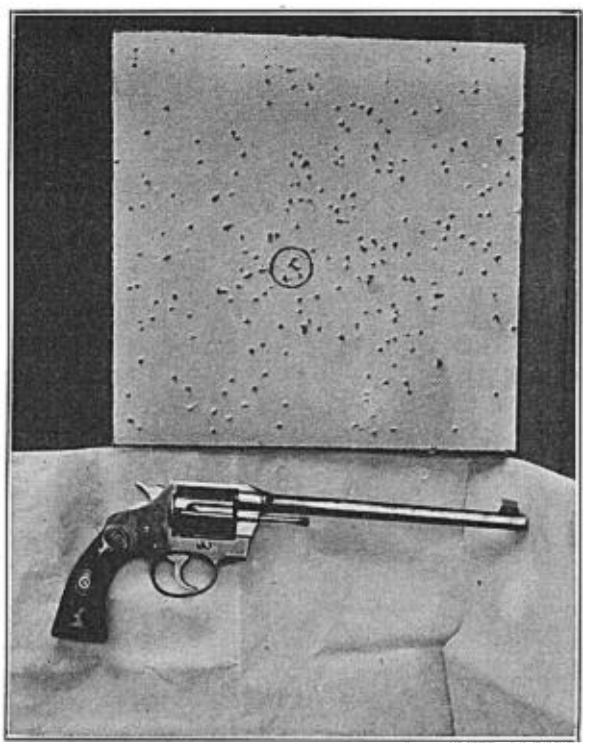

Fig. 76. COLLECTING PISTOL, AND CARDBOARD TARGET FROM THE REVERSE SIDE. DUST-SHOT OVER THREE GRAINS BALLISTITE, AT FORTY FEET. THE SMALL CIRCLE IS ONE INCH IN DIAMETER AND WAS PENETRATED BY FOUR PELLETS.

uted and 83 percent of the charge was placed within a circle of fifteen inches diameter. Dust shot penetrated twenty-five sheets of napkin tissue paper. With no. 9 shot the penetration was sixty-one sheets of paper.

With this arm the writer has collected Spotted Owl, Long-eared Owl, Cooper Hawk, Mountain Quail, Hybrid Flicker, many smaller woodpeckers, and some hundreds of smaller birds. In addition to birds, ground squirrels, chipmunks, lizards and snakes have been taken. The herpetologist needs no other arm.

Of course if you are going on a regular collecting expedition, take a

double-barreled shot gun, an auxilliary, and a rifle if you can, but many of us cannot go on expeditions. To the one who travels "light", this brief discussion is addressed.

I am indebted to Dr. J. Grinnell and to Mr. Joseph Dixon for advice on the use of Ballistite.

Los Angeles, California.

FURTHER REMARKS UPON THE KERN RED-WING

By JOSEPH MAILLIARD

AS STATED in the description of the Kern Red-wing (*Agelaius phoeniceus aciculatus*) in THE CONDOR, vol. XVII, p. 13, the dates on which the specimens therein mentioned were taken (which were May 27 to June 7) were rather late in the season, and on account of the fading and abrasion of the plumage, which deteriorates rapidly as midsummer approaches, these specimens were not in the best condition for satisfactory comparison with other forms of Agelaius. This year (1915), for the purpose of procuring specimens in fresher plumage, a short trip was made by the writer at a somewhat earlier date into that part of the Kern River valley where these birds were found the previous year by A. van Rossem. As it was desirable to avoid the complication of migrations, the latter part of April was chosen as the safest period and a time when migration would be over and local breeding begun.

Dr. Barton W. Evermann, Director of the Museum of the California Academy of Sciences, participated in this expedition, and thanks are due to him not only for his genial companionship but as well for great assistance in procuring specimens, though his main object was botanizing. Specimens of *A. p. aciculatus* were secured on April 17, 18 and 19, and were in much better condition for study and comparison than was the material procured the year before, and from which this form was described.

The study of this new material confirms the conclusions before reached, and also develops the fact that as late as the above dates in April, at least, the middle wing-coverts of the males are apt to have a heavy black tipping. Of twelve males secured eight had all the feathers of the middle wing-coverts tipped with black, some of them quite heavily, three had all but one or two so tipped, while on the remaining specimen the tipping had been worn off on all but two of the feathers. Judging from this, it is reasonable to suppose that still earlier in the spring all the feathers of the middle wing-coverts are tipped with black, and probably rather heavily.

Only twelve males and four females of this form were obtained and among these were no special deviations from the measurements already given in the original description, with the exception of the culmen-from-base of one of the females extending the maximum of this measurement to 24.6 millimeters, in place of the former extreme of 23.9. No minimum extremes were altered by this additional material though the averages of one or two measurements varied slightly from those given in the tables, but not sufficiently to make any practical difference. For instance, the average length of culmen from base in the case of these twelve males is less than that of the twenty-one males