haps still room for one of a bird which was taken at Worcester, Massachusetts, May 23, 1891, by a young son of Mr. Charles K. Reed, the well-known taxidermist. Mr. Reed mounted the bird and afterwards sold it to Mr. John E. Thayer in whose collection, at Lancaster, Massachusetts, it has been for some time. A few months since, Mr. Thayer, learning that I was anxious to obtain a New England example of the Barn Owl, most generously sent me this Worcester bird with his compliments. The specimen, a male, is well mounted and in fine condition in every way.

THE CERULEAN WARBLER (DENDROICA CÆRU-LEA) AS A SUMMER RESIDENT IN BALTIMORE COUNTY, MARYLAND.

BY FRANK COATES KIRKWOOD.

As a live bird the Cerulean Warbler was unknown to me until June 11, 1899. That year they were noted until August 15, and a nest supposed to be of this species was found. In 1900 it was carefully watched for and recorded from April 29 to August 19, and a nest with four eggs was collected on June 10.

Ravenshurst farm, where I have spent nearly every Sunday and occasionally other days for the last twelve years, is situated at the head of Dulany's Valley in Baltimore County and is thirteen miles N. N. E. from the centre of Baltimore City. The house stands at an elevation of 480 feet above tide-water and a sharp declivity in front of it gives an uninterrupted view of the entire length of the valley (lowest point 170 feet above tide), with Towson, seven miles from Baltimore City, on the horizon at the other end, on an elevation of about 500 feet. Near Towson, at a similar elevation, is the point, where Mr. J. Hall Pleasants on July 14, 1893, collected the adult and immature male birds recorded in 'The Auk' (Vol. X, 1893, p. 372). This remained as our only Maryland Record until the present.

My experience during the last two summers leads me to suppose that the species has a decided preference for high open woods clear of underbrush, and if this is so it would account for the scarceness of the species. Between our orchard and the pike, extending a considerable distance, is a strip of original growth timber, about 150 feet wide, from which the underbrush has been cleared, while across the pike is a large tract of woods. On the other side of the orchard, about one eighth of a mile distant from the strip mentioned, is another piece of woods from which the hogs have cleared the underbrush. This also has considerable woods in its original state, on one side. It is in these two pieces of woods that the birds have summered. The trees are principally chestnuts, with oaks, hickorys, tulip trees, etc.

The following items are taken verbatim from my pocket notebook and were made with the aid of a strong field glass. Had the birds been round previously I assuredly would have known it, but my first note is as follows:

June 4, 1899. In gate woods, hear a strange warbler song but fail to see bird.

June 11. In company with Mr. F. A. Saunders, who is visiting me, the strange song of the 4th is identified as that of the Cerulean. We heard it in the woods west of the pike and in response to our 'squeaking' the bird came within twenty-five feet of us, perching on a bare branch. We then kept quiet and it leisurely hunted the lower branches of the tree for about ten minutes, occasionally singing. Subsequently we heard the song of this species in three or four different parts of the woods, but whether the same individual or not we could not say.

June 18. One singing in gate woods. It seemed to prefer the bare or dead twigs of the lower branches of the trees some twenty-five to forty feet up. During the forenoon it sang incessantly with its feathers fluffed out. From 4.20 P. M. to dusk heard it off and on. Once while it was singing some short distance off I was watching another sitting silent on a dead twig with its feathers fluffed out.

During the forenoon in the gate woods a female Redstart was observed pulling material out of a nest saddled on a chestnut branch. Investigation showed a warbler's nest of some kind ready for eggs, but it was not a Redstart's, and no other bird was

seen near it though it was watched for a long time. It was placed on lowest branch but one, five feet out from tree and thirty-five feet, eight inches up from ground. It was completely gone on 25th.

- June 25. See one singing in different trees in gate woods. Once it dressed its feathers, sitting on a dead twig and sing ing all the time, otherwise it was hunting slowly like a Wormeating Warbler. It would sing for about twenty minutes and then fly off, and we could not locate it until it started to sing again. On one occasion while watching it singing, heard another about one hundred yards off.
- July 2. Singing as I enter gate woods; it stopped at 10.18 A. M., flew to another tree, sang a few times and stopped. Commenced again at 11.04 and sang eight minutes, when it came down from branches to a nearly rotten stump not two feet high and hunted round it for several minutes, then flying off. Sings again from 11.31 for ten minutes (12.15 to 12.45 in house for dinner). Do not hear it again until 5.45 P. M., it then sings right along to 6.15, when I go to supper.
- July 3. At 9.15 A. M. sings several times; 9.25, sings four or five times, 9.31 started and sings nineteen minutes. It then flies from top of one high chestnut to another and chased a Goldfinch out of sight. A few minutes later it was singing again and kept on incessantly, first in one tree then in another until I get a stiff neck and leave at 11 A. M.
- July 4. Sang from 9.21 A. M. for eighteen minutes, and from 9.59 for seven minutes. Do not hear it again until 7.27 P. M., when it sang for twelve minutes; later it sang off and on until 7.32, when I heard last song for the day.
- July 9. See one, with only slight indications of a collar on either side. Singing off and on all day in gate woods.
- July 16. 9.46 A. M., sang for about twenty minutes; rather more sluggish than usual.
- July 27. Singing in pig woods.
- July 30. One sings eight to ten times in woods west of pike near point where it was first seen on June 11.
- Aug. 10. One singing in pig woods.
- Aug. 13. One singing in pig woods.

Aug. 15. One singing in gate woods.

Apr. 29, 1900. One singing on bare branch of apple tree; finally flies into pig woods.

May 6. Watch one singing in pig woods and hear another at same time; later hear one in gate woods where it is also singing in afternoon.

May 7. One singing at house this morning.

May 13. Two singing at once in pig woods. See pair, male and female, in gate woods.

May 20. Forenoon singing in pig woods; afternoon singing in gate woods.

May 27. While watching male singing as it flies after female in pig woods, hear another singing in the distance.

June 3. Forenoon singing in pig woods; about noon singing in gate woods; afternoon don't hear it at all.

June 4. One singing in pig woods.

June 10. Hear one singing in gate woods and in a minute or two see it chasing a female Redstart round top of a low oak, jerking out its song all the time. Happening to look directly overhead, see nest on lowest branch of a tulip tree, and going to one side see female on nest; 3 P. M., one singing in gate woods; a little later one singing in pig woods.

June 17. One singing in pig woods.

June 18. One singing in pig woods.

June 20. Two singing at once, nearly all day, in pig woods.

July 15. Watch one singing in pig woods and hear another at same time.

Aug. 19. See two or three and hear two or three others singing immature or imperfect (?) songs in pig woods.

I have given the above memoranda verbatim as made at the time and it will be noted that only twice was the species found in the dense woods. This does not prove that they may not have been there often enough, only that I did not observe them there, while I was almost certain to find them in either one or other of the two open pieces.

In habits this bird considerably resembles the Worm-eating Warbler, being rather slow and sedate in its movements. It will also sit for long periods motionless and silent, on a dead twig

under the branches proper of the high trees. Here it also to a considerable extent does its hunting. Its song is so distinctive that after being once recognized it can never be confused with that of any other bird. Although recognizing the impossibility of portraying bird songs, I venture on the following which, however, is

$$\frac{}{\text{we ch ch ch ch}} \bigwedge \bigwedge \frac{}{\text{ch}} \frac{}{\text{ch}} \frac{}{\text{we je je je}}$$

not very satisfactory. It also gives its song in a low tone as if it whispered it, and unless the bird is carefully watched the observer might be led to believe that he heard a second bird singing in the distance. I have watched a bird sing thus between each regular song, at other times it would not give it at all, or only occasionally, while on two or three occasions I heard it given for quite a while to the exclusion of the regular song, and quite often have heard it given two or three or even more times in succession between regular songs.

The nest found on June 18, 1899, could not at that time be definitely stated to be a Cerulean's, as only the Redstart that demolished it was seen at it. It was, however, an exact counterpart of the nest collected on June 10, 1900. This latter nest contained four eggs, very slightly incubated. Their ground color is a pale grayish with a slight bluish cast, marked with pale reddish specks and spots, nearly all being on the larger end. One egg, however, has also some fairly large blotches of a much lighter reddish round the girth. Underlying this on the larger ends of all are lilac spots of different shades.

The nest is made of brown bark fibre, with some fine grass stems among it, and is finished inside with a few black horse-hairs. Outside it is finished with gray shreds of bark, spider web, and a few small fragments of newspaper that had been water-soaked. It measured, inside 1\frac{3}{4} inches across by 1 inch deep; outside 2\frac{1}{2} inches across. As the branch sloped, one part of the rim is within \frac{3}{4} of an inch of it, while the opposite part is 1\frac{3}{4} inches above it, the material comes down on one side of branch to 2\frac{1}{4} inches below the rim. On this side a tiny twig arches out from branch and extending to the rim is imbedded in the nest, and the leaves which grew from its top shaded the nest. On the other side the material merely came down to the branch, which meas-

ured one inch in diameter at this point. Just clear of the nest on the lower side a twig one half an inch in diameter slopes away from the nest but does not support it in any way. The end of the branch was broken off, as often occurs with the tulip tree, and the nest was placed near this end, 15 feet out from the tree and 48 feet 6 inches up from ground. There was but one branch growing lower on this tree and it was on the other side, so that there was a clear space between the nest and the ground. The nest would answer in every particular for the original of the one described on page 360 of the October, 1900, number of 'The Auk,' collected in western Ontario by Mr. W. E. Saunders, whose brother was with me when I first identified this species.

TWO RACES OF THE VARIED THRUSH.

BY JOSEPH GRINNELL.

Hesperocichla nævia nævia (Gmelin) Ridgway.

Turdus nævius Gmelin, Systema Naturæ, Tom. I, 1788, p. 817.

Hesperocichla nævia Ridgway, Proc. U. S. Nat. Mus., Vol. III, 1880, p. 166.

 $\mathit{Type},\ Q\ ad.,\ No.\ 1222,\ coll.\ J.\ G.,\ Sitka,\ Alaska,\ July\ 2,\ 1896;\ collected$ by J. Grinnell.

Description—Back, scapulars and rump bistre; upper tail-coverts brightening into vandyke brown; upper surface of tail dark Prout's brown; top of head and cervix dark mummy brown abruptly outlined posteriorly against the color of back. Dark parts of outer surface of closed wing seal brown; tips of greater and middle wing-coverts, and spot composed of outer webs of primaries near their base, tawny ochraceous; edging of outer webs of terminal third of primaries and secondaries hazel. Foreneck tawny, brightest laterally on malar region; lores and auriculars same as top of head, perhaps slightly grayish; feathers of auriculars with narrow ochraceous shaft-streaks; longitudinal stripe from above eye along upper margin of auriculars, and spot on lower eyelid ochraceous; complete pectoral band raw umber; remainder of under parts posterior from pectoral band tawny ochraceous; feathers of sides with crescent-shaped tips of light sepia; flanks nearly uniform light sepia with a perceptible raw umber tinge; middle of belly white with a faint buffy