XII.—Miscellanca.

Note on the habit of the young Cuckoo in ejecting the eggs and young of its foster-parent from the nest.—For many years I have been very desirous of observing the habit of the young Cuckoo at the time when it was just hatched, and when it was busy in ejecting the eggs and young of its foster-parent from the nest. During my stay at Oatlands in the summer of last year (1884) I am glad to say that a favourable and satisfactory opportunity occurred of making this observation.

I began in June to search the grounds carefully for as many nests as I could find, that were likely to have Cuckoos' eggs in them, and was fortunate enough to find one in a spot convenient for making continued observations, on the 17th day of June, 1884. The Cuckoo's egg was in the nest of a Hedge Accentor, containing four of its own eggs, and built in a Bramble bush, near the bottom of the sloping terrace at Oatlands. I tried the Cuckoo's egg and one of the Hedge Accentor's in water, to ascertain if they were fresh or sitting. The former floated, denoting that it was sitting; the latter sinking to the bottom, was of course fresh.

On the 25th of June I examined the nest. No change had taken place. There were still the one Cuckoo's egg in the nest and the four Accentor's.

On Friday, the 27th June, I looked at the nest at three o'clock in the afternoon, and the Cuckoo's egg was hatched, and one of the Accentors. At twenty-five minutes to six o'clock I looked at the nest again, and another Accentor's egg was hatched.

On Saturday morning, 28th June, I rose early, and went to the nest at twenty minutes to four o'clock A.M. All was quiet, and the old bird on the nest. At two minutes past five o'clock saw into the nest. There were just the young Cuckoo, the two young Accentors, and the two eggs. A few minutes after five o'clock the young Cuckoo attempted to put an egg out of the nest, by getting it on to its back in the most clumsy manner; but it did not succeed in getting the egg high enough to roll it

over the edge of the nest. Immediately after this proceeding the old Hedge Accentor came on to the edge of the nest, and stooped down with its head into the nest, and took some white matter into its mouth (I think excrement from the young birds) and swallowed it. The old bird went on to the nest and off again four or five times in about two hours. I left for breakfast at eight o'clock, the old bird sitting on the nest. Returned at half-past eight. The old bird was off the nest, and the young and eggs as before lying quiet at the bottom of the nest. I don't think the young birds have been fed yet. The old bird has returned and is sitting on the nest. I feel sure that the old bird takes the dung from the young birds and eats it. The old bird remained off about ten minutes at a time. She is back and on the nest again this time in a minute or two. She appeared to be very uneasy and uncomfortable, raising her wings and standing on her legs in the nest. In this position she made a kind of shuffle, and in a moment the Cuckoo was on the back of the Hedge Accentor, and in another moment the Accentor was off the nest and the Cuckoo into the nest off her back: what this meant it is impossible to say. The mother was off for about ten minutes, and then on again and off, and when off an Accentor's egg was put on to the edge of the nest by the young Cuckoo in my presence. This was at half-past ten. The egg rested on the edge of the nest for some time, and then it fell down into the bush, by the movements of the old bird on the edge of the The Cuckoo then fell into the bottom of the nest, apparently in a very agitated state and overpowered or exhausted by the effort. The mother then returned again to the nest, and proceeded as before in taking off the dung from the young and She remained a very short time on the nest, but scemed very uneasy, raising herself and standing in the nest. The Cuckoo seems to be increasing in bulk, and is much agitated. lying at the bottom of the nest. The two young Accentors lav motionless at the bottom of the nest, whilst the Cuckoo kept moving its wings like hands as if to excite or stir its companions into action. In about twenty-five minutes the Cuckoo made two desperate efforts to get one of the young Accentors flung over

the edge of the nest, but failed, for when it got the young one to the top it fell back again into the bottom of the nest. unsuccessful struggle took place when the mother was on the About eleven o'clock the first young Accentor side of the nest. was put over the edge of the nest, exactly as illustrated by Mrs. The mother was present, but took no notice of Blackburn.* the affair going on, but looked on calmly. The second egg was pushed out at one P.M., in the presence of myself, Miss Abbs, and my sister, whom I had specially invited to come and see the proceedings of the young Cuckoo. The last and fourth of the lot we left in the hands of the destroyer. It was sitting almost on the back of the Cuckoo, which had had one try to put it over the edge of the nest, but had failed. At 3.30, when we returned to examine the nest, the young Cuckoo was the sole occupant.

The first baby Accentor which had been thrown on to the edge of the nest was still alive, so we put it into a Whitethroat's nest, which had four young ones about a day old, and from all appearances it will be properly attended to by its foster-parents.

The Cuckoo's proceeding, as I saw it, is, in my opinion, the most wonderful and unaccountable piece of business that I ever witnessed in bird-life.

On Saturday, July 5th, I looked into the nest, and to my astonishment the young Cuckoo lay motionless at the bottom of the nest, and I found that it was dead. In all probability it had died from the heat of the sun, for a day or two before, when looked at, the Cuckoo was panting, evidently affected by the heat; in fact we had shaded it, by placing some Bracken leaves to screen it from the sun, but by some means the leaves had been removed, and the sun's rays fell direct on the young Cuckoo.

To summarize this account, I may state that the eggs of the Cuckoo and four eggs of the Accentor were found in the nest of the Accentor on the 17th June. On Friday, June 27th, the Cuckoo's egg and two eggs of the Accentor were hatched: On Saturday, June 28th, one attempt to put out Accentor's egg did not succeed. At 10.30 A.M. first egg was put out of nest. About

^{*} See "The Pipits," illustrated by L. H. B., Plate XI. 1872.

11 A.M. the first young Accentor was pushed out. At 1 P.M. the second egg was pushed out in the presence of three witnesses. The last of the lot, the second young Accentor, was removed between 1 and 3 o'clock P.M., during the time I was away or absent.

These observations, though they may seem to be a repetition of the accounts given by Dr. Jenner, Montagu, Mrs. Blackburn, and other accurate observers, are nevertheless necessary in these days, for in the minds of some ornithologists it seems to be still an undecided question, How the young Cuckoo gets the young of its foster-parents from the nest? I have before had an opportunity of ascertaining the fact, and expressing my full belief in the accounts given by Dr. Jenner, Col. Montagu, and others, as stated in my Catalogue, p. 26, but till last summer I had not had a successful opportunity of watching the whole process so carefully as I was able to do on that occasion.

Since these observations were made my attention has been directed to the following quotation from Mr. Henry Seebohm's "History of British Birds," Vol. II., p. 383:—

"It has been said, on what appears to be incontestable evidence, that the young Cuckoo, soon after it is hatched, ejects the young or eggs from the nest by hoisting them on its back; but one feels inclined to class these narratives with the equally well-authenticated stories of ghosts and other apparitions which abound."

The facts observed with much care, and minutely narrated in this note, support the "incontestable evidence" given by Dr. Jenner, Montagu, and Mrs. Blackburn, so fully and conclusively, that I am at a loss to understand how any one who has not personally investigated and observed this habit of the young Cuckoo, could allow himself to express so strong an opinion as Mr. Seebohm has done in the Italicised portion of the above quotation.

There are still many points in the life-history of this interesting summer visitor which require to be worked out accurately. There are many questions regarding it which no ornithologist is able to answer satisfactorily, as for instance:

Is it the male or female Cuckoo that produces or utters the well-known familiar note, or both?

Most of the Passeres moult before migrating. Does the young Cuckoo moult before migrating? or does it moult in its winter quarters?

How does the old Cuckoo come to the knowledge of the time when it must place the egg in the nest it selects for that purpose? For if the Cuckoo's egg should not hatch for a few days after the others, the young Cuckoo would be too feeble to perform the operation of lifting the young of its foster-parents over the edge of the nest.

In concluding these observations, I cannot help pointing out that the recent provisions of the Bird Acts prevent, at present, in England, any further investigations on these and other important points in Bird-life, which require to be made during the breeding season, in order to complete our knowledge and perfect the history of our British Bird-Fauna.—Observed by John Hancock, at Oatlands, Surrey, in June, 1884, and read Nov. 26th, 1885.

Note on the Indian form of the Spotted Eagle (Aquila nævia, Briss.) shot on the Northumberland Coast, near Cresswell, October 31st, 1885.—A few days ago I had the pleasure of examining, through the kindness of Mr. Robt. Duncan, a fine specimen of this interesting bird, which has not before been recorded as occurring on the Northumberland coast or in our district. It is a bird of the year, in very fine unworn plumage, and undoubtedly the same as the Indian form, of which I have examined many specimens. The length of this example, from the end of bill to end of tail, was 28 inches. The extent of wings, 67 inches. Eye hazel.—John Hancock.

Lichen Memorabilia, 1884.—A day spent in the neighbourhood of Morpeth, Northumberland, in the early part of last year, although none of the brightest so far as the weather went, is now a pleasant recollection. The spring had come but not the leaves or the fresh grass, yet it was easy to feel all about one that these were coming, for the whole earth seemed slowly awaking out of a sleep, and quietly swelling out her fulness of reviving life in embryo and bud. The old irregular town of Morpeth is