

## THE " WING-CLAPPING " OF THE NIGHTJAR.

BY

T. A. COWARD.

EVERYONE who has closely observed the Nightjar (*Caprimulgus europæus*) in flight, especially when it is indulging in nuptial display, must have noticed that occasionally it produces a sharp cracking sound, which is mechanical rather than vocal. This sound has been repeatedly attributed to the striking together of the tips of the wings, but this, I am sure, is not the correct explanation. Similar sounds are produced by the Short-eared Owl (*Asio flammeus*) and Wood-Pigeon (*Columba palumbus*), and, I believe, in exactly the same way. The wings are thrown sharply upwards and at once brought down with considerable speed and muscular strength; the sound is similar to that produced by the cracking of a whip-lash. That the soft feathers of either Nightjar or Owl could be struck together so as to produce so noticeable a sound seemed to me impossible. I have never managed to get a satisfactory view of the Nightjar on the wing so that I cannot affirm that the tips are not struck together. With the Short-eared Owl, however, I felt certain that the tips did not meet either above or below the body, and I am quite satisfied that during the nuptial flight of the Wood-Pigeon, when the wings crack, there is no contact. It is true that efforts to make a detached wing crack by imitating the action of cracking a whip produced very slight results, but it must be remembered that my muscles did not act directly on the wing like the pectoral muscles of a bird, and, what is more important still, that wing was not alive.

When in 1919 I expressed my opinion about all three species in my *Birds of the British Isles*, my friend Mr. Irvine Whittaker of Heywood wrote telling me that he agreed with my view. He has now satisfied himself by further observation, and has kindly added a note in support of the whip-lash idea.

It is not necessary to mention all the writers who have affirmed the wing-clapping explanation, but the statements of some of the leading historians of birds may be quoted. Macgillivray says, on the authority of Durham Weir, that the Nightjar "like some of the pigeon tribe, strikes the points of the wings so forcibly against each other as to be heard at a considerable distance." I find no mention of the crack in the first and third editions of Yarrell's "History," so presumably the observations in the fourth edition may be

attributed to Newton, who edited this volume. His remarks are most interesting, for he was evidently puzzled. "On the wing . . . the cock occasionally produces another and equally extraordinary sound, which by some excellent observers has been called a squeak, but to the writer is exactly like that which can be made by swinging a whip-thong in the air. How the bird produces this sound is unknown, but it often accompanies a sudden change in the direction of flight, and especially a sudden shooting aloft which ends in a downward glide. When disturbed from rest, something of the same kind may also be often heard, but then it would seem to be the result of smiting the wings together, though at other times the flight is noiseless."

Seebohm is less clear, for he talks of "a whooping sound ; but how this is performed, whether by the throat or the wings, is at present unknown." Sharpe, next to publish, refers to "a cracking noise, which is apparently produced by striking its wings together over its back, after the manner of a Wood-Pigeon." Saunders, in 1899, says that "the wings are sometimes brought into contact and produce a loud clap," and Dr. Eagle Clarke, in the new edition, adds the words "above the back" after "contact."

Kirkman gives two second-hand observations, the first by Dr. Heinroth who watched the bird in captivity during display: "the enraptured bird flying in a fierce frenzy through the room, smiting its wings with resounding force above its back." The other is on the authority of Ussher and Warren: "When about to smite the wings the Nightjar slackens his pace, gives a kind of leap in the air, at the same time straightening the wings, and striking the backs of them together." Finally, in the *Practical Handbook*, Oldham says: "A loud clap is often produced by bird in flight smiting its wings together above its back."

Similar repeated assertions of wing-smiting are made about the Short-eared Owl and Wood-Pigeon, but it is unnecessary to quote them.

Newton and Ussher and Warren both refer to the visible rise or "leap in the air" of the bird ; this anyone may observe in the Wood-Pigeon. In the Owl that I watched the lift of the body, caused by the downward stroke of the wings, was very noticeable.

When so many acknowledged authorities make similar assertions it seems presumptuous to express an opposite opinion, yet I believe that Mr. Whittaker's observations confirm my theory, and hope to hear unbiassed opinions.

*Note by Mr. I. Whittaker.*

During the past spring I have spent considerable time observing Nightjars and have obtained unusually good views of birds flying about at sundown. Watching them from only a few yards distance I discovered that in making the peculiar cracking noise with the wings—the so-called “wing-clapping”—the wings did *not* actually meet, neither as they were thrown upwards nor downwards; thanks to the comparatively good light and the fact that the birds were silhouetted against the sky I saw this quite clearly and without any suggestion of doubt. It would appear, therefore, that this mechanical sound is not produced by the wings striking together over the back as is often stated.

IRVINE WHITTAKER.