

THE BIRDS OF AFRICA.¹

THE appearance of the first volume of the history of its fauna at a time when all our attention is concentrated on South Africa is doubtless in a great degree accidental, although nevertheless opportune, if only as a reminder that, when the present period of stress and anxiety has passed away, there are matters other than war and armaments demanding our attention in that part of the globe. It was a fortunate circumstance that the editor of the series—Mr. W. L. Sclater—was able to secure for his first volume the valuable services of a local ornithologist, well acquainted, not only with the birds themselves, but likewise with their habits and the localities they frequent. Unhappily, the labours in this world of Mr. Stark are ended for ever, his career having been terminated, as he stood at the door of his own house in Ladysmith, by the fragment of a shell which struck him dead almost on the spot. It is said that his last words were "Take care of my Cat," doubtless referring to the present volume and its successor, of which latter we believe we are right in saying that the MS. was complete at the time of the author's death.

The fact that Mr. Stark's last thoughts were for the safety of the scientific labours on which he had expended so much time and care confers a pathetic interest on the appearance of the volume before us, and should go far to disarm hostile criticism, were such otherwise called for. Fortunately, however, under no circumstance would there apparently be much, if any, room for unfavourable comments, as the execution of the work seems, from all points of view, excellent and praiseworthy.

As stated in the editorial preface, the series, of which the present volume forms the first instalment, is intended to deal with the fauna of that portion of Africa lying to the southward of the Zambesi and Cunene Rivers; and therefore includes, not only the very peculiar and restricted assemblage of animals characteristic of Cape Colony and the other districts south of the Orange River, but likewise embraces a large stretch of country whose animals have a wider geographical range. The present volume treats of about one-half the total number of Passerine birds met with in the area under consideration. It is satisfactory to find that in the treatment of his subject the author has seen fit to follow, so far as practicable, the plan of arrangement and description adopted by Mr. Oates in his contribution to the "Fauna of British India," under the editorship of Mr. Blanford.

Accordingly we have, so far as the present volume and its successor are concerned, the great advantage of having the faunas of the two great old-world dependencies of the British Empire described on a similar plan, so that they are readily comparable with one another. And how extraordinarily different is the avian fauna of South Africa—especially as regards its host of peculiar generic types—from that of Peninsular India, can be ascertained at a glance by comparing the systematic index in Mr. Oates' volumes with that in the one now before us.

And yet, in spite of this great general faunistic difference, there are in birds, as in mammals, a certain number not only of generic, but likewise of specific types common to the two areas. A case in point is afforded by the Spotted Creeper (*Salpornis spilonotus*), the African and Indian forms of which are regarded by the author as worthy only of subspecific distinction. And we are glad to notice that, not only does the author give an unqualified adherence to the manifold advantages offered by trinomial nomenclature, but that he has not been frightened by the bugbear of "absence of connecting links" out of regarding closely allied, but widely separated, forms as local races. Consequently we have the African representative of the

Spotted Creeper appearing as *Salpornis spilonotus salvadorii*, while the Indian form would be distinguished as *typicus*.

As regards the general scheme of classification for the "orders," the author adopts the one proposed by Dr. P. L. Sclater in 1880; and although there are doubtless some respects in which this scheme is susceptible of emendation, it is a very workable one, and has the great merit of simplicity.

A somewhat instructive parallel may be drawn between the avian and mammalian faunas of South Africa. Attention has been already drawn to the large number of genera of birds peculiar to Africa, notable examples occurring in the families of the Starlings (*Sturnidae*) and Weaver-Birds (*Ploceidae*); and these may be regarded as the analogues of the many genera of Antelopes likewise characteristic of the country. But the parallelism by no means stops here. Many of the species of the Antelopes (as well as other mammals) are restricted to the area south of the Orange River, but are represented by kindred types in the districts to the northward of that river. Among the Passerines we may notice the Red-shouldered Glossy Starling (*Lamprocolius phaenicopterus*), the Cape Weaver-Bird (*Sitagra capensis*), the Cape Long-tailed Sugar-Bird (*Promerops cafer*), and the Cape Sun-Bird (*Cinnyris chalybeus*), as well-known species exclusively confined to the Cape, but represented in Natal or in districts still further north by allied species or subspecies, precisely in the same manner as are Antelopes. Evidently, therefore, we have to deal with some deep-seated cause which has modified a large portion of the Cape fauna; but the exact nature of this cause has yet to be worked out.

So far as we have had an opportunity of testing them, Mr. Stark's diagnoses and "keys" to the various genera and species he describes are all that the most exacting ornithologist can desire. But the work is very imperfectly described, as in the lamented author's last words, as a mere "Catalogue." On the contrary, it contains some delightful and interesting descriptions of the habits and mode of life of African birds, of which we know far too little. Witness, for instance, the author's description of the "showing-off" of the male of the Cape Long-tailed Sugar-Bird,¹ the illustration of which we are enabled by the courtesy of the publisher to reproduce. "Towards the end of April or beginning of May," he writes, "the males, when not feeding, fighting, or chasing one another with shrill cries, may be usually seen perched on the summit of some prominent bush or young pine-tree, their long, flexible and curved central tail-feathers blowing about in the wind, often in a reversed curve over the bird's head. At intervals one of them will mount twenty or thirty feet in the air, incline his body backwards, violently jerk his tail up and down, and at the same time rustle the feathers together, and bring his wings with sharp, resounding 'claps' against his sides, before returning to his perch to indulge in an outburst of song. Occasionally a male may be seen to throw the longer tail-feathers into a double curve. At the same season the hens amuse themselves by flying round and round in a small circle."

Special attention has been devoted to nidification, and the illustration on page 76, in which the nests of three species of Weaver-Birds are shown in a single tree, is highly noteworthy. Still more remarkable are the three enormous dome-shaped nests of the Sociable Weaver-Bird depicted in the photogravure on page 117. Before dismissing the subject of illustrations, it may be mentioned that these are in the main restricted to the head and wing, which afford the best diagnostic features of the species described. The mere fact that they were drawn by Mr. Grönvold is a sufficient guarantee of the excellence of their execution.

¹ "The Fauna of South Africa. Birds." Vol. i. By A. C. Stark, M.B. Pp. xxx + 322, illustrated. (London: R. H. Porter, 1900.)

² "The Birds of Africa, comprising all the Species which occur in the Ethiopian Region." By G. F. Shelley. Vol. i. 1896. Vol. ii. Part i. (London: R. H. Porter, 1900.)

¹ The only error we have hitherto noticed in the book is that this illustration is lettered *Promerops capensis* instead of *P. cafer*.

In conclusion, we can scarcely bestow a higher meed of praise on the labours of the late Mr. Stark than the expression of the hope that the subsequent volumes of this valuable series will be equal in merit to the one before us.

Captain Shelley's work covers a much wider field than that of Mr. Stark, embracing all the birds of Africa south of the Tropic of Cancer, together with those of Madagascar and other islands off the African coast. In other words, it describes the avi-fauna of the Ethiopian region in its more extended sense. A notable feature of the second part is the beautiful series of coloured plates with which it is illustrated; the portraits of the birds, as in all Mr. Grönvold's work, being remarkably true to nature, and at the same time forming artistic pictures.

The first volume, which made its appearance four years ago, consists of a classified list of the genera and species of African birds, with references to the works in which the names first appeared. With the second volume commences the descriptive portion of the work; the first part, in addition to containing the Angola Pitta and the two other Ethiopian representatives of the "Oligomyodæ," being devoted to the beautiful Sun-Birds, or *Nectariniidae*.

With reference to the plan of the work, it is stated in the Introduction that it will "consist of a series of handy volumes complete in themselves," and that the second volume "will be an acceptable work to the Field Naturalist, for whom many of the notes will be specially intended." From these statements, we venture to think, it may be inferred that the work is intended to supply all the needs of the African ornithologist when working alone in the wilds, far away from a library. But, on examination, we doubt whether this is altogether the case. For example, when the genus of a bird has been changed, there is in most cases no possibility of finding out the name under which it was originally described; the references in the first volume merely giving the name of the author of the species, and the place and date of publication, without mention of the genus. Neither can we approve of the mode of arrangement of the references themselves. We have, for instance, on page 89, the following, viz.:—*Chalcomitra senegalensis* (Linn.), Shelley, B. Afr. i. No. 47 (1896); *Cinnyris senegalensis*, Shelley, Mon. Nect. p. 267 (1878); *Nectarinia senegalensis*, Bocage, J. f. O. 1876, p. 435. Apart from the omission of the references to the Linnean genus and place of publication, the arrangement of these references is, we venture to submit, totally unjustifiable, and they should have been put in just the reverse order, when they would accord with their chronology. As a matter of fact, references to the author's previous works are, we think, a great deal too prominent. Moreover, the complicated system on which the author makes his references is liable to lead to great confusion in the event of any typographical error. For example, the omission

of a couple of brackets on page 95 of the first volume would lead the reader to believe that a certain bird was described as *Newtonia brunneicauda* three years before the date of publication of the generic name!

In regard to the arrangement of the families of Passeres, it is a matter for regret that there is much divergence between the present work and that of Mr. Stark. In the latter the arrangement is from the highest to the lowest, commencing with the *Corvidæ*, and concluding with the "Oligomyodæ." Captain Shelley, on the other hand, adopts the opposite plan, commencing with the "Oligomyodæ";



FIG. 1.—Male of the Cape Long-tailed Sugar-Bird "showing-off." From Stark's "Birds of South Africa."

and in this he is no doubt perfectly justified, although we are at a loss to ascertain why he follows on immediately with the *Nectariniidae*, which are usually placed near the middle of the series. Apart from this, we have no hesitation in saying that, in a matter which is really of no importance at all, it would be a great convenience if ornithologists could agree to follow the same method of arrangement of the families. And this reminds us that there is another difference between Captain Shelley and

Mr. Stark; the former adding the termination "formes" to the names of the orders. Here again, although we regard the addition of the termination in question as totally superfluous, and at the same time ugly, we should be quite prepared to sacrifice our personal prejudices for the sake of uniformity.

The descriptive portion of the work appears to be carefully executed, and the "keys" seem to be well drawn up. While quoting from the publications of the numerous field-naturalists who have written on African ornithology, Captain Shelley is by no means dependent altogether on the observations of others for his accounts of the habits of many of the birds he describes, since he himself has twice visited Egypt, and has likewise travelled in Cape Colony and Natal, where he had the advantage of meeting such well-known local ornithologists as the Messrs. Ayres. As a "bird-country" Captain Shelley speaks very enthusiastically of Africa, observing that it "may fairly claim to be the metropolis of the song-birds, for the bush resounds with their melody; it is the winter home of a large proportion of our most attractive small birds, such as the nightingale and the many warblers which enliven our English gardens and surrounding country in summer, as well as the swallow, our well-known harbinger of spring."

Mention has already been made of the beauty of the plates illustrating the second part, and it may be added that the typography and general "get-up" of the work are beyond praise. If the same high standard be maintained in the succeeding issues, the complete work cannot fail of proving highly attractive to all bird-lovers.

R. L.

NOTES.

PROF. W. C. BRÖGGER, of the University of Christiania, the distinguished Norwegian geologist, will deliver the second course of the George Huntington Williams memorial lectures at the Johns Hopkins University during next month. Prof. Brögger is the most prominent Scandinavian geologist, and has published a series of memoirs upon the geology of Southern Norway that have given him rank among the leading investigators of his time. As the Williams lecturer, he follows Sir Archibald Geikie, who opened the lectureship two years ago with a course upon the founders of geology. Prof. Brögger will lecture upon modern deductions regarding the origin of igneous rocks, a subject that has commanded the attention of many geologists in recent years.

THE Royal Meteorological Society will attain its jubilee on Tuesday next, April 3, having been founded on April 3, 1850. The celebration of this fiftieth anniversary will be commenced at a commemoration meeting to be held on Tuesday afternoon, when the President, Dr. C. Theodore Williams, will deliver an address, and delegates from other societies will be received. A conversazione will be held at the Royal Institute of Painters in Water Colours in the evening. In addition to the pictures in the galleries, there will also be an exhibition of meteorological instruments, models and photographs, and lantern demonstrations will be given by Colonel H. M. Saunders, Mr. T. C. Porter and Mr. W. Marriott. On Wednesday, April 4, there will be an excursion to the Royal Observatory, Greenwich, and a dinner at the Westminster Palace Hotel. As a memento of the jubilee of the Society, a bronze commemoration medal, bearing on the obverse a portrait of Luke Howard, F.R.S., has been struck.

THE New York *Electrical Review* states that the North German Lloyd has decided to equip all its swift steamships with wireless telegraphy apparatus to announce their proximity to the German coast. The *Kaiser Wilhelm der Grosse* has been

equipped with the necessary instruments, and a similar outfit has been installed on an island near the mouth of the Ems in the North Sea. The ship will thus be able to exchange signals with the mainland long before she is sighted, or has passed out of view when outward bound. The question of installing wireless telegraphy apparatus on the Nantucket Shoals Lightship, off the Massachusetts coast, is under consideration by the Lighthouse Board. Incoming steamships, similarly equipped, could thus be reported many hours before they could be sighted at Fire Island.

M. CREVAT-DURAND, who recently died at Fontainebleau, bequeathed to the Pasteur Institute the sum of 100,000 francs.

DR. PATRICK MANSON, professor of medical pathology at the English Colonial School of Medicine, has been elected an associate of the Paris Academy of Medicine.

It is stated that Dr. Edward Ehlers, of Copenhagen, is about to proceed to Crete to make arrangements for the segregation of the lepers on the island. There are about 2000 of these, and they will be placed on a small island off the north coast.

THE death is announced, at New York, of Dr. Oliver P. Hubbard, formerly professor of chemistry and geology in Dartmouth College, and one of the founders of the American Association for the Advancement of Science.

It is reported that the Lemaire scientific expedition has reached Tenka, after a successful and peaceful journey of 3000 kilometres along the border of the Congo State. Three days east of Lualaba Mission the expedition met Major Gibbons, who was on his way to Tanganyika, *via* Lafoi, and thence to the Nile.

WE learn from *Science* that under the direction of Prof. A. A. Wright, of Oberlin College, systematic excavation has been commenced in Brownhelm, Ohio, near Lake Erie, and about twelve miles from Oberlin, to recover mastodon remains, the first of which were discovered several years ago. The jaws and head, both tusks, together with a number of ribs and vertebrae, have been obtained in a good state of preservation.

THE Royal Scottish Geographical Society proposes to organise a purely Scottish expedition to the South Pole to work in conjunction with the British and German expeditions. The sphere of the expedition will be the Weddell sea quadrant, south of the Atlantic Ocean, while the British expedition will explore to the south of the Pacific Ocean and the Germans to the south of the Indian Ocean. The leader will be Mr. William S. Bruce, who visited the Antarctic regions in 1892 and 1893.

At the last meeting of the Paris Société d'Encouragement, the president, M. Carnot, referred to the death of Prof. S. Jordan, a member of the council of the society. Prof. Jordan was professor of metallurgy at the École centrale for many years, and was widely known among metallurgists and engineers. He was a member of the Comité des Arts chimiques, and represented more particularly the metallurgy of iron and steel. It was upon his report that the society awarded the Lavoisier medal to M. Osmond in 1897, for his excellent researches on the microstructure of steel.

It was mentioned last week (p 498) that a gentleman had given the Scottish Meteorological Society a donation of 300*l.* to be spent during the next two years in the discussion of the results of the observations made on Ben Nevis and at Fort William since 1881. By the patriotic generosity of Mr. Mackay Bernard, of Dunsinane, whose three donations amount to 1500*l.*, the observations will be carried on to the end of next year. By the 1000*l.* presented by the Royal Societies of London and Edinburgh, the hourly and other observations will be