

before I returned in the autumn, and apparently of the same disease which sickened Pete. Bute died about three weeks after my departure, and Topsy about three weeks later. I was sorry to lose Bute for I valued her, but I was really sad at Topsy's demise—she had been an admirable pet from beginning to end, always quiet and docile, with all the virtues and none of the vices of her brother and sister, and she had become quite a companion.

Of course their food (they lived entirely on raw beef except a very occasional sparrow) probably did not agree with them, but I lay the cause of their death more to their want of freedom, and consequent lack of exercise. Pete was too young perhaps when I took him, and on account of his contrariness did not get the advantages the others did. He got no exercise whatever, and sickened long before the others showed any unhealthy signs. Bute was intractable, and though she could fly around a room and get some exercise that way, she seldom did. Topsy, on the other hand, got more or less of open-air freedom, and I feel sure would have lived had I been home to take her out.

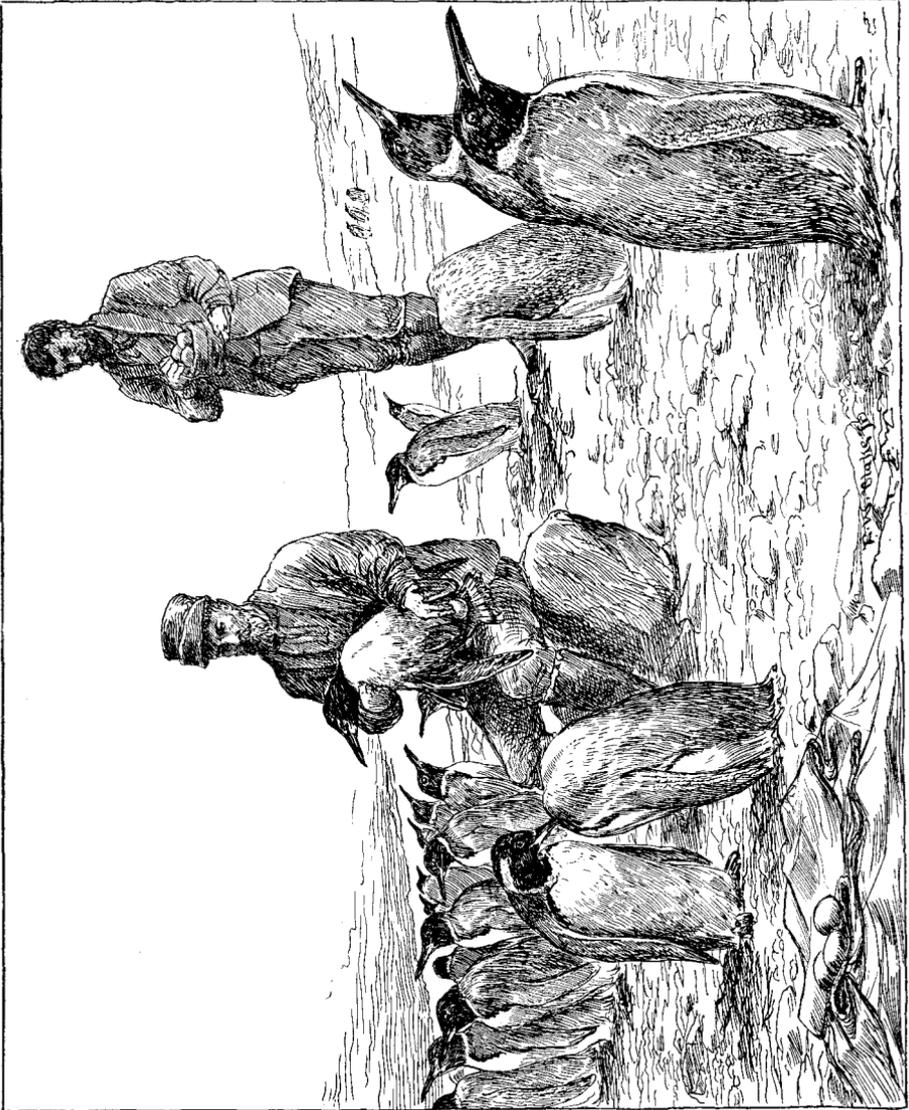
In ending I would suggest that if any one wants more accurate data obtained under more natural conditions than the above, they should find some Hawk's nest of easy access, and climb up to it each day for regular data. I leave this task to some one else, however, as I have neither the time nor the patience.

BREEDING HABITS OF THE KING PENGUIN (*APTENODYTES LONGIROSTRIS*).

BY R. G. HAZARD.

Plate VIII.

IN 'BULLETIN No. 2' of the United States National Museum (p. 41), Dr. J. H. Kidder mentions a curious habit of the King Penguin (*Aptenodytes longirostris*) upon the authority of Captain Joseph J. Fuller. He says: "Captain Fuller, of the schooner Roswell King, informs me . . . that they [the King



KING PENGUIN (APTENODYTES LONGIROSTRIS).

Penguins] build no nests whatever, carrying the egg about in a pouch between the legs, and only laying it down for the purpose of changing it from male to female."

This 'Bulletin No. 2' was printed in 1875. In 1891 I had the good fortune to meet this same Captain Joseph J. Fuller, then about to sail for the Antarctic as Master of the sealing schooner 'Francis Allyn.' After some experimenting with cameras to find one best suited to the bad conditions of the Antarctic, we found a camera combining the essential virtues and agreed that one principal point to settle should be this one as to the egg-carrying habits of the Penguins. If possible a King Penguin was to be photographed so as to show the egg in position in the sac. Captain Fuller told me he felt sure he could manage the camera, which was fitted with a roll holder and films, but greatly feared the dark and foggy weather prevailing would hinder the best results.

About ten months later I received four rolls of films by schooner from St. Helena, where the 'Francis Allyn' had transhipped her catch of skins. They were Eastman films and many were excellent, especially such as had been exposed in sunlight at Cape Town, St. Helena, and Tristan d'Acunha. But the special efforts made to photograph seals, sea elephants, Penguins of all degrees, Skuas (*Buphagus skua antarcticus*), Johnny Rooks (*Senex australis*), Sheath-bills (*Chionis minor*), and many another strange and interesting denizen of that comfortless Antarctic region were all failures, in part at least. The weather was no doubt largely responsible for this, and in many cases there was barely light enough to show a horizon line. The large percentage of failures was relieved by the fact that some of the best and most decipherable among them bore precisely upon the point stated by Dr. Kidder upon the authority of Captain Fuller. The photograph from which Mr. E. Whitney Blake has kindly made a careful scale drawing now reproduced, was one of the best of three, all meant to show the egg *in* the pouch. All three were taken on Kerguelen's Island, during January, 1894, at which time the whole 'rookery' of Penguins was incubating. While the sailors caught the birds, then not a hard task, Captain Fuller photographed them, and while very bad photographically, it is possible to decipher at least one of them, as I think the drawing

proves. A careful inspection of the original shows the larger end of the egg, which barely projects from the external sac, which holds it firmly between the thighs of the bird, a King Penguin. The bird reclines in its position in the sailor's arms, while his finger holds the egg securely, to prevent the bird dropping it. The soles of the Penguin's feet, if one may so speak, are turned up toward the camera, and are clearly defined against the breast. Mr. Blake's drawing shows all this and more.

The Penguins, as shown in the photograph, stand dismally in pessimistic attitudes, scornful and disgusted at the intrusion, highly disapproving and indignant over the outrage with the camera. They seem to be wondering over the strange times on which they have fallen.

Upon Captain Fuller's return, nearly eighteen months after his departure, he brought me a most interesting mass of material, including a fine series of the eggs of *Chionis minor*, with skins of this singular bird, which is neither Pigeon nor Gull, yet partakes of the nature of each. He also secured eggs of the Southern Skua (*Buphagus skua antarcticus*), Wandering Albatross (*Diomedea exulans*), and others, all of which I retain in my cabinet.

If the accompanying drawing should be held to have settled this question, I shall hope to be allowed to convey the information to Captain Fuller, who is at present pursuing his isolated, arduous life among the seals, and to whom the credit should belong. I myself am entirely convinced from the development of my plate, that the case is proved beyond any question.



PLUMAGES OF THE YOUNG HOODED WARBLER.

BY WILLIAM PALMER.

SEVERAL young male Hooded Warblers (*Sylvania mitrata*) collected by myself in Hanover County, Virginia, in July, 1892, differed so much from published descriptions that I called attention to them in a paper read at the Washington meeting of the A. O. U. of that year. Hoping to secure a better series,