

THE LAYSAN ALBATROSS AND ITS DANCE.*

BY WALTER E. FISHER.

With many ornithologists the word Laysan is so intimately connected with pictures of albatrosses that the two have become inseparably associated. Surely no birds can stand out more vividly in our memory than these splendid creatures, not alone on account of their great numbers and remarkable appearance, but more perhaps from the unusual charm and interest which attaches to their personalities. Their large size and striking plumage at once raise them to an exalted place among all sea birds, a position similar to that which tradition and fancy have accorded the eagle among birds of the land.

The Laysan albatross or gony is distributed all over the island, with the single exception of the beaches, which on all sides except the west are colonized by the black-footed albatross. The flat plain surrounding the lagoon is their favorite habitat, and I found the young here in far the greatest numbers. There seems scarcely a tussock of the grass which covers the greater portion of the slopes of the island but has an ungainly young bird in its shadow ready to snap at the intruder with a show of ferocity. These amusing creatures sit on their heels with the whole length of the tarsus on the ground or tilted slightly in the air, as shown in the illustration. Their spare time is spent in gazing stupidly around, but if their reverie is at all disturbed by one passing too near they fly into an apparent rage, lean forward and snap their beaks viciously, or sway their uncouth bodies from side to side in a frantic attempt to maintain a balance.

Usually, after the first paroxysm of snapping is over, one can stroke them with little danger of scratched hands. They maintain a small fire of objection, with impotent nips, or try to sidle off. The old birds, however, are quite different, and do not seem to mind the presence of man. One can walk among them without disturbing their various occupations and amusements in the least. Only when suddenly startled do they exhibit any tendency to snap their bills, and then they are easily calmed. They back away from any proffered familiarity with great rapidity, unless suddenly hindered by a tuft of grass, which event surprises them immoderately. They will not allow themselves to be handled, and make off at a great rate if one offers them this indignity. They have a half-doubting inquisitiveness which leads them sometimes to walk up to the visitor and examine anything conspicuous about his person. One bird became greatly interested in the bright aluminium cap to my tripod, and strolled up and examined it carefully with both eye and beak, appearing somewhat astonished when the cap tinkled.

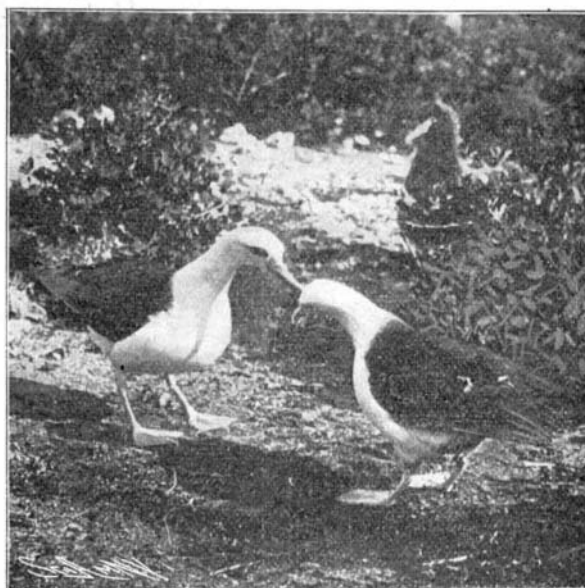
When standing beside their young they present a very attractive sight, as their plumage is always immaculately clean. The region about the eye is dark-grayish, overhung by a pure white eyebrow, which gives them a decidedly pensive appearance. They have an innate objection to idleness, and consequently seldom stand around doing nothing, but spend much time in a curious performance, the meaning of which I am at a loss to explain. It has been called courting, but as the antics are carried on during the birds' residence of about ten months on the island, they are probably an amusement, in which the albatrosses indulge immoderately in lieu of other diversion. This game, or whatever one may wish to call it, may have originated in past time during the courting period, but it certainly has long since lost any such significance.

The proceeding in brief is as follows: Two albatrosses approach each other bowing profoundly and stepping rather heavily. They circle around each other nodding solemnly all the time. Next they fence a little, crossing bills and whetting them together, pecking meanwhile, and dropping stiff little bows. Suddenly one lifts its closed wing and nibbles at the feathers underneath, or, rarely, if in a hurry, merely turns its head and tucks its bill under its wing. The other bird during this short performance assumes a statuesque pose and either looks mechanically from side to side or snaps its bill loudly a few times. Then the first bird bows once and, pointing its head and beak straight upward, rises on its toes, puffs out its breast, and utters a prolonged nasal groan, the other bird snapping its bill loudly and rapidly at the same time.

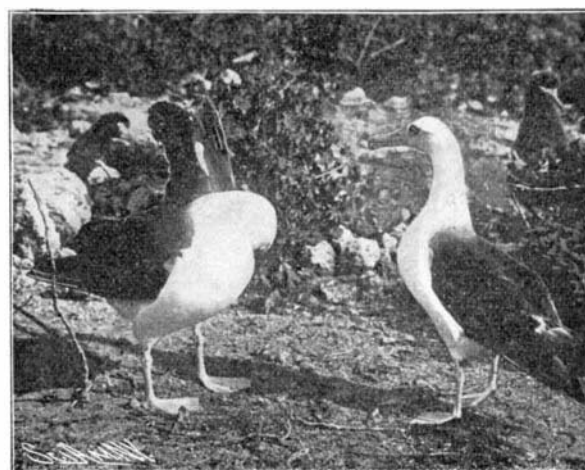
Sometimes both birds raise their heads in air and either one or both utter the indescribable and ridiculous bovine groan. When they have finished, they begin bowing at each other again, almost always rapidly and alternately, and presently repeat the performance, the birds reversing their rôle in the game, or not. There is no hard and fast order to these antics, which the seamen of the "Albatross" rather aptly called a "cake walk," but many variations occur. The majority of cases, however, follow the sequence I have indicated. Sometimes three engage in the play, one dividing its attention between two. They are always most polite, never losing their temper or offering any violence. The

whole affair partakes of the nature of a snappy drill, and is more or less mechanical.

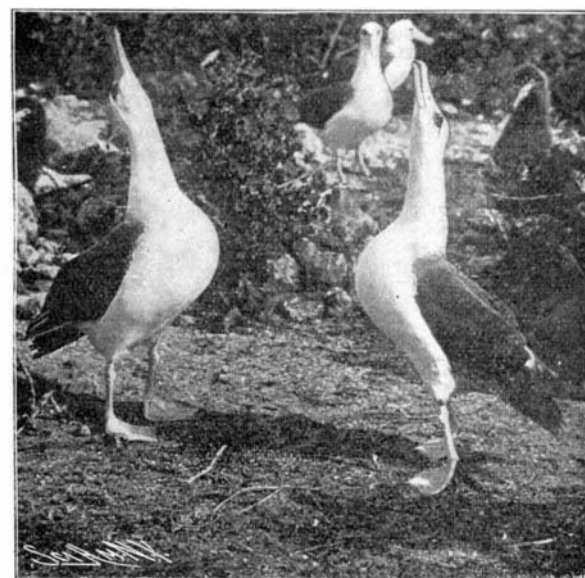
Occasionally one will lightly pick up a twig or grass



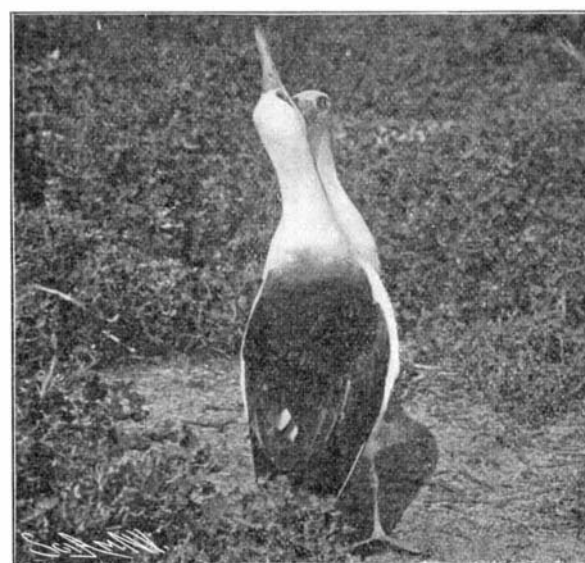
The First Step in the Dance.



The Second Step in the Dance.



Finale of Dance—The Duet.



A More Common Ending of the Dance—One Bird "Singing," the Other Snapping Its Beak.

THE ALBATROSS "DANCE."

straw and present it to the other. This one does not accept the gift, however, but thereupon returns the compliment, when straws are promptly dropped and all

hands begin bowing and walking about as if their very lives depended upon it. If one stands where albatrosses are reasonably abundant, he can see as many as twenty couples hard at work bowing and groaning on all sides, and paying not the slightest attention to his presence. When walking through the grassy portions of the island, I have seen white heads bobbing up and down above the green, as solitary pairs were amusing themselves away from the larger congregations of their kind. If I walked up to them, they would stop and gaze in a deprecating way, and walk off, bowing still, with one eye in my direction. Having reached what they considered a respectful distance, they would fall to and resume their play.

Should one enter a group of albatrosses which have been recently engaged in this diversion and begin to bow very low, the birds will sometimes walk around in a puzzled sort of way, bowing in return, a curious fact, which F. H. von Kittlitz recorded as early as 1834:

"When Herr Isenbeck met one, he used to bow to it, and the albatrosses were polite enough to answer, bowing and cackling. This could easily be regarded as a fairy tale; but considering that these birds, which did not even fly away when approached, had no reason to change their customs, it seems quite natural."*

One moonlight night we strolled over the island after nocturnal petrels and visited a portion of a populous albatross colony. The old birds were still hard at work executing that queer "song dance," and in the uncertain light the effect was one long to be remembered. Their white plumage made them conspicuous for a long distance over the stretches near the lagoon. From all sides the sound of their groans and bill-snappings was audible above the continual thin, high squeak of young albatrosses and the moans and caterwauling of shearwaters and petrels. During some quieter spell in the activities of the vocalists far-away groans were borne to us across the placid lagoon, as a reminder that in other parts the good work was still going on. By this time many of the albatrosses had started off fishing, as they seem to do a large part of it after dark, probably toward morning.

It is interesting to note that the antics which have just been described are not limited to this species, but, in a modified form, are practised by *Diomedea nigripes*, and are mentioned also by Rothschild and Hartert† in connection with *Diomedea irrorata* Salvin. Probably all species of the genus exhibit the trait in some form.

A complete article on the work done by the United States Fish Commission in the Laysan Islands will appear in the next number.

The Current Supplement.

A full-page portrait of the late Prof. Theodor Mommsen, perhaps the most prominent German historian of the last century, will be found on the front page of the current SUPPLEMENT, No. 1458. An adequate biographical notice accompanies the portrait. "Ancient Chaldean Irrigation" is the title of an article that will doubtless be of interest to agricultural engineers. An instructive article on Experiments with a New Type of Compound Locomotive in Italy gives the results which have been obtained on the Meridionali Railway. The Wilde lecture before the Manchester Philosophical Society had for its subject the atomic theory. The paper will be published in full, the first installment appearing in this issue. Mr. E. W. Nelson tells much that is instructive about the Agaves, a remarkable group of useful plants. Prof. F. Webster writes on the "Insect Pests of Plants and Their Effect on American Agriculture." Mr. Dugald Clerk, England's foremost authority on gas engines, writes instructively on "Governing Gas and Gasoline Engines."

Electrification of the Park Avenue Tunnel.

The General Electric Company of Schenectady, N. Y., has secured the contract from the New York Central Railroad for the equipment of the lines which run through the Park Avenue tunnel in New York city, with electricity. The work will cost about \$12,000,000. For over a year the company has been experimenting with various types of locomotives for the purpose of determining which is the most suited to the needs of the tunnel. The contract includes thirty locomotives, ten steam turbines of 5,000 kilowatts, together with the equipment of a big power plant.

On November 21 the high-speed electrical experiments on the Berlin-Zossen Railroad were terminated for the season. Altogether, a million dollars have been spent simply for the purpose of ascertaining just what a high-speed electrical train can do. A syndicate composed of two great German electrical companies will shortly publish the results which have been obtained—results which will be of the utmost value to electrical engineers the world over.

* Abstracted from "Birds of Laysan and the Leeward Islands, Hawaiian Group," in the U. S. Fish Commission Bulletin for 1903.

* Extract from Avifauna of Laysan, p. III (F. H. von Kittlitz in Museum Senckenbergianum, I, pp. 117 et seq.).

† Novitates Zoologicae, vi, p. 135.