HENSHAW, Emperor Goose in Hawaii.

A recent author on ornithological subjects arranges a list of birds into two classes, one, like the sparrows, that annually rear two broods in the season; and one, including Bob-white, never rearing but one. This little episode does not prove him incorrect and yet there are points circumstantially convincing to my mind that he was mistaken.

It was just one month after the events narrated above. October had come: the Nimrods had put on cap and boots and the fusillade had already begun, but not yet near. I was reading quietly in my chair when I was startled by the heavy report of a gun, fired evidently only a short distance away from my yard but the scene invisible by intervening foliage. A little later I saw go marching proudly by, a boy with a big gun in one hand and a big male Bob-white in the other, great triumph sparkling in his eyes. He probably feasted that night. Menu — Quail on toast, seasoned with a mayonnaise of glory.

OCCURRENCE OF THE EMPEROR GOOSE IN HAWAII.

BY H. W. HENSHAW.

THE present season of 1902-03 bids fair to be a notable one as regards the occurrence of North American birds in the Hawaiian Islands. About the middle of October there occurred a heavy northeast trade storm, and, coincident with it, an unusually heavy flight of ducks and geese reached the island of Hawaii. Flocks of the former, consisting of scores, and even of hundreds, were reported from various points on the windward side. The ducks were mostly of two species, viz., the Pintail (*Dafila acuta*), and the Shoveller (*Spatula clypeata*). Although these two species are of annual occurrence upon all the islands of the group, where they winter, they have not been known in such abundance upon the island of Hawaii, not a favorite with ducks, for many years.

Among the flocks were doubtless not a few individuals of species

HENSHAW, Emperor Goose in Hawaii.

hitherto unknown to occur in the islands, but when killed these usually fell into the hands of natives and of sportsmen from whom next to nothing can be learned respecting the contents of their game bags save that among them were strange ducks.

The capture of three "Black-headed Ducks" has been reported from Puna and a photograph of two of these, taken after death by Mr. H. E. Wilson, is before me as I write. From this I identify them, with but little doubt, as the American Scaup Duck (*Aythya marila nearctica*). Neither of the Scaups has hitherto been reported from the group.

A fine specimen of the Red-breasted Merganser (M. serrator) fell into the hands of Mr. C. M. Walton of Pahala, Kau, by whom it was preserved. This is the second recorded instance of the occurrence of this duck in the archipelago, though there is reason to believe that its presence here is not so very exceptional.

December 9, a specimen of *Larus glaucescens*, in superb juvenile winter plumage, was shot near Hilo by Mr. John Rinehart. This gull is known to occur in Hawaiian waters more often than any other North American gull, being piloted down here from San Francisco by both steamers and sailing vessels.

But the most interesting capture to be recorded is that of four Emperor Geese (*Philacte canagica*) at Kalapana, on the Puna coast, December 12, by Mr. H. E. Wilson, who fortunately possessed the interest and skill requisite to preserve all four. Two of the birds I have seen. They are in superb winter plumage, and are not only the first to be reported from the Hawaiian Islands but, if I mistake not, from any locality anything like so far south as latitude 19°. Several species of geese in small numbers have found their way to the islands from time to time during the fall migration, and during the present season small companies have been reported here and there along the coast. No doubt it was in company with other geese or with ducks that the present wanderers were enticed to southern latitudes.

Such casual occurrences as those above noted — but few in comparison with the many that are never chronicled — indicate the manner in which birds may be introduced to new and distant lands, and how the habit of annual winter migration to suitable regions is begun.

Vol. XX

The habitual winter migration of ducks from the northwest coast to the islands, as well as that of the plover, has unquestionably been going on for-many centuries, and had begun long before the islands possessed human inhabitants to profit by the visits of food birds. Yet no doubt the migration from America is very recent as compared to the length of time most of the land birds have been island residents.

At first thought it seems strange that, with the exception of the Short-eared Owl — now a long time resident and even yet a casual emigrant from the northwest — no west coast land birds have found their way hither, or at any rate have become established in the islands. The most probable explanation of the fact is that when blown off the coast, as the land birds must frequently be, and even when such strays join flocks of water birds on their way hither, as no doubt they often do, their strength gives out long before they reach port. Circumstances must needs be very exceptional when even so strong and hardy birds as woodpeckers can fly two thousand miles without stopping, if indeed they can perform the feat under any conceivable conditions. In the unlikely event of the birds reaching land after so prolonged and tremendous a flight there remains the probability of their dying from exhaustion.

Nevertheless, the ancestral stock from which have sprung the Meliphagidæ and the Muscicapidæ, which are probably of Australian derivation, and the Drepanididæ, which may have come from neotropical America, successfully solved what must have been practically the same problem of prolonged flight over the ocean, and why not such birds as the American Picidæ, Fringillidæ, and Corvidæ, to say nothing of other hardy and strong flying birds, not one of which has a representative in the island avifauna?

In referring to the migration of the west coast water birds to the archipelago I have elsewhere expressed the belief that, as time went on, the number of American species wintering in the islands was likely to increase, and that perhaps some might become permanent residents. I did not for the moment take into account the constantly increasing number of island sportsmen and gunners to whom everything that flies is game, and who are not only sure to prevent the possibility of additional species locating on the islands but who threaten the existence of several species long resident. Vol. XX FISHER, Preserving Equilibrium by Use of One Wing. 167

It is much to be regretted that the few species which are legitimate objects of pursuit by sportsmen, like the Hawaiian Goose, Hawaiian Duck, and the Plover and Turnstone, are becoming scarcer and scarcer every year. Yet it is at least to be said that these birds serve as food, and hence are not entirely wasted. No such excuse, however, can be urged in defence of the slaughter of such birds as the Hawaiian Stilt, Night Heron, Mud Hen (*Gallinula*), and Coot (*Fulica*). These birds, though occasionally eaten by the natives and Portuguese, are too 'gamy' for most palates, and are usually shot and thrown away, with the natural result that they have been quite exterminated in many localities and are becoming scarcer and scarcer in all districts.

PRESERVING EQUILIBRIUM BY THE USE OF ONE WING.

BY WILLIAM HUBBELL FISHER.

Plate VII.

I was at the Brown Palace Hotel, in the city of Denver, Colorado, from March 14, 1902, until the 21st day of the following May, and occupied a room on the seventh floor, about ninety feet above the pavement of the street. There I quite frequently fed the House Finches (Carpodacus mexicanus frontalis) of the neighborhood with bird seed spread upon my window sill. These birds became quite familiar. Often as many as twelve or fourteen of them were upon the sill at once. As the spring advanced, they came in pairs, and it frequently happened that a hungry pair having taken possession of the seed would drive off all the others until they had satisfied their appetites. In driving off the other birds, this pair would often meet with great opposition, and frequently severe combats occurred, often in mid air. I have pictures of the birds one darting down upon another as a hawk does upon his prey. At other times, the possessors of the locality would drive the intruders to the edge of the sill, and would often push off the intruder. Two of my instantaneous photographs reveal the