

on shore regularly, like the Seal, at certain seasons to breed, but at length acquired the power of rearing their young in the open sea.

Amongst birds the Petrels are pelagic in habit, the largest amongst them being the Albatross. Of the various kinds of Petrels we necessarily saw a great deal. They were our constant companions in the Southern Ocean, following the ship day after day, dropping behind at night to roost on the water and tracing the ship up again in the early morning by the trail of *débris* left in its wake.

The Oceanic Petrels have reduced the science of flight to the condition of a fine art. The flight of the Albatross has always excited wonder and admiration; nevertheless, some of the smaller Petrels fly quite as well. There are almost all gradations to be observed in the powers of flight of different birds, in the various stages of perfection in the shaping of the wings, and the skill in the use of them shown by the birds. Refinement in the art of the use of the wings by birds seems to run in two different directions. The flight of the Albatross, regarded as the perfection of one mode, the soaring method, performed by aid of great length of wing, may be contrasted with that of the Humming Bird, equally perfect in its way and far more rapid, but performed by the use of short wings and excessively rapid motion of them.

The movement of the Albatross may be compared to that of a skilful skater on the outside edge; the Humming Bird's flight is just like that of an insect. The Albatross ekes out to the utmost the momentum derived from a few powerful strokes, and uses it up slowly in gliding, making all possible use at the same time of the force of the wind.

I believe that Albatrosses move their wings much oftener than is suspected. They often have the appearance of soaring for long periods after a ship without flapping their wings at all, but if they be very closely watched, very short but extremely quick motions of the wings may be detected. The appearance is rather as if the body of the bird dropped a very short distance and rose again. The movements cannot be seen at all unless the bird is exactly on a level with the eye. A very quick stroke, carried even through a very short arc, can of course supply a large store of fresh momentum. In perfectly calm weather, Albatrosses flap heavily.

The Great White Albatrosses which are seen behind ships are usually by no means beautiful objects. The long wings look far too long for the body, and being so narrow, the body looks heavy and out of proportion to them. Further, five out of six of the birds seen are young ones, in immature brown