

different parts of the surface, which, though nearly flat, show some slight variety of level. The higher parts, particularly around the outer edges, are composed chiefly of coral sand, either mixed with or underlying guano. Nearer the centre is a large tract, rather more depressed, forming a shallow basin, in which the bulk of the sea-water must have been evaporated, and whose surface (now partly covered with guano) is a bed of sulphate of lime, while, further, there is a still lower point, the least elevated of the whole, where the lagoon waters were without doubt most recently concentrated. This latter locality is a crescent-shaped bed, about 600 feet long by 200 or 300 feet wide, having a surface very slightly depressed from the outer edge toward the middle. Around the borders are incrustations of crystallized gypsum and common salt, ripple-marks, and similar evidences of the gradually disappearing lake. The whole is composed of a crystalline deposit of sulphate of lime, which, around the borders, as already observed, is mixed with some common salt, while near the centre, where rain-water sometimes collects after a heavy shower, the salt is almost entirely washed out, leaving the gypsum by itself. It is closely, but not hard, packed, and is still very wet. By digging 18 or 24 inches down, salt-water may generally be found.

These facts help us to understand the varying conditions in which we now find the guano beds. The most important part, and that from which the importations have thus far come, rests on a bed of sulphate of lime, of an earlier but similar origin to that just described above; part rests on a coral formation; while still another part, covering a large tract, has been by the action of water mixed with coral mud.

The first-named deposit, lying on the sulphate of lime bed, has a peculiar character. It is covered by, or consists of, a hard crust, that is from one-fourth of an inch to an inch and a half in thickness, beneath which lies a stratum of guano varying in depth from one inch to a foot. In many places, where the guano was originally shallow, the whole is taken up and formed into the hard crust which then lies immediately on the sulphate. This crust, when pure, is snow-white, with an