S.V.O M. O. W. O.

CARROLL ON THE STANDARD OF THE

mounds, only these two contained eggs; we were too early; a week later and we should doubtless have found many more. To give you an idea of the place this bird chooses for its remarkable mode of rearing its young, I will describe it as nearly as I can: -The Wongan Hills are about thirteen hundred feet above the level of the sea, in a north-north-east direction from Drummond's house in the Toodyay; their sides are thickly clothed with a dense forest of Eucalypti; and at their base is a thicket, extending for several miles, of uprightgrowing and thick, bushy plants, so high in most parts that we could not see over their tops, and so dense, that if we separated only for a few yards, we were obliged to cooey, to prevent our straying from each other; this thicket is again shadowed by a very curious species of dwarf Eucalyptus bearing yellow blossoms and growing from fifteen to thirty feet in height, known to the natives as the spear-wood, and of which they make their spears, digging sticks, dowaks, &c.; the whole formation is a fine reddish ironstone gravel, and this the Leipoa scratches up from several yards around, and thus forms its mound, to be afterwards converted into a hot-bed for the reproduction of its offspring. The interior of the mounds is composed of the finer particles of the gravel mixed with vegetable matter, the fermentation of which produces a warmth sufficient for the purpose of hatching. Mr. Drummond, who had been for years accustomed to hot-beds in England, gave it as his opinion that the heat around the eggs was about 80°. In both the nests with eggs the White Ant was very numerous, making its little covered galleries of earth around and attached to the shell, thus showing a beautiful provision of Nature in preparing the necessary tender food for the young bird when emerging from the shell; one of the eggs I have preserved shows the White Ant's tracks most beautifully; the largest mound I saw, and which appeared as if in a state of preparation for eggs, measured forty-five feet in circumference, and if rounded in proportion on the top would have been full five feet in height. I remarked in all the nests not ready for the reception of eggs the inside or vegetable portion was always wet and cold, and I imagine, from the state of others, that the bird turns out the whole of the materials to dry before depositing its eggs and covering them up with the soil; in both cases where I found eggs the upper part of the mound was perfectly and smoothly rounded over, so that any one passing it without knowing the singular habit of the bird might very readily suppose it to be an ant-hill: mounds in this state always contain eggs within, while those without eggs are not only not rounded over, but have the centres so scooped out that they form a hollow. The eggs are deposited in a very different manner from those of the Megapodius; instead of each being placed in a separate excavation in different parts of the mound, they are laid directly in the centre, all at the same depth, separated only by about three inches of earth, and so placed as to form a circle. I regret we were so early; had we been a week later, the probability is I should have found the circle of eggs complete. Is it not singular that all the eggs were equally fresh, as if their development was arrested until the full number was deposited, so that the young might all appear about the same time? No one considering the immense size of the egg can for a moment suppose the bird capable of laying more than one without at least the intermission of a day, and perhaps even more. The average weight of the egg is eight ounces, and four of them on being blown yielded nearly a pint and a half. Like those of the Megapodius, they are covered with an epidermis-like coating, and are certainly as large, being three inches and three quarters in length, by two and a half in breadth; they vary in colour from a very light brown to a light salmon. During the whole day we did not succeed in obtaining sight of the bird, although we saw numerous tracks of its feet, and many places where it had been scratching; we also saw its tracks on the sand when crossing the dried beds of the swamps at least two miles from the breeding thicket, which proves that the bird, in procuring its food, does not confine itself to the brushes around its nest, but merely resorts to them for the purpose of incubating. The native informed us that the only chance of procuring the bird was by stationing ourselves in sight of the mound at a little distance, and remaining quiet and immoveable till it made its appearance at sun-down; this I attempted, and, with the native, encamped within twenty yards of the mound about an hour before sunset, taking the precaution to conceal ourselves well with bushes from the quick eye of the bird, but leaving just a sufficient opening to get a fair sight with my gun; in a half-sitting, half-crouching position I thus remained in breathless anxiety for the approach of the bird I had so long wished to see, not daring to move a muscle, for fear of moving a branch or making a noise by crushing a dead leaf, till I was so cramped I could scarcely bear the pain in my limbs; the bird did not however make its appearance, and the native, with the fear of wading through the thicket in darkness (for there was no moon), became so impatient, that he started up and began to talk so loud and make so much noise, that I was compelled to give up all hopes of seeing the bird that night; however, just as we were passing the mound we started the bird