radius of the circle. It does not trace this out, as we should do, by fixing a point for the centre, around which to draw the circumference: on the contrary, it perches on the circumference with its claws, and works with its bill from the centre outwards; and hence it is that in the numerous excavations recently commenced, which we have examined, we have uniformly found the termination funnel-shaped, the centre being always much more scooped out than the circumference. The bird consequently assumes all positions while at work in the interior, hanging from the roof of the gallery with its back downwards, as often as standing upon the floor. We have more than once, indeed, seen a Bank-Martin wheeling slowly round in this manner on the face of a sand-bank, when it was just breaking ground to begin its gallery. All the galleries are found to be more or less tortuous to their termination, which is at the depth of from two to three feet, where a bed of loose hay and a few of the smaller breast-feathers of geese, ducks, or fowls is spread with little art for the reception of the eggs. It may not be unimportant to remark, also, that it always scrapes out with its feet the sand detached by the bill; but so carefully is this performed, that it never scratches up the unmined sand, or disturbs the plane of the floor, which rather slopes upwards, and of course the lodgement of rain is thereby prevented."

A nest taken from a bank of the Thames, on the 4th of July 1854, was composed of a layer of grasses, above which was a second layer of the Swan's breast-feathers, so placed as to curl over the eggs, the appearance forcibly reminding one of the calyx of a tulip or white water-lily; although the hole was damp, the platform of grasses and feathers formed a warm and dried receptacle for the eggs, which were of a pearly white, and six in number. It is supposed that the Sand-Martin only rears one brood in each year, but I think it sometimes goes to nest a second time.

This species, like the other members of the family, is very much infested with parasites, respecting which the following note has been kindly transmitted to me by Signor Henry Giglioli, a gentleman of Pavia, at present residing in this country for the prosecution of his scientific studies:—"In at least twenty nests of the Sand-Martin (*Cotyle riparia*) which I examined at the beginning of July, in Surrey, I found all of them infested with parasites, some living on the young birds, and others on the materials of which the nest was formed. These parasites were so numerous that the eggs, as soon as laid, were literally covered with their excrements, giving them a spotted appearance. What strikes me as strange in the matter is, that I have observed this in no other country. When in Paris last year, I examined at least fifty Sand-Martins' nests, but no trace of a parasite was discoverable. On examination of the specimens I placed in spirits, I find they comprise five distinct species:—a Tick (*Ixodes* ——?), a Flea (*Pulex* ——?), a larva, probably that of the flea, an insect very like the *Ricinus hirundinis* of Latreille, and a brachelytrous Coleopteron (*Oxytelus rugosus*?)."

The Sand-Martin is found over all the British Islands, even to the outer Hebrides. The Duke of Argyll informs me that a considerable colony breeds opposite Balmoral Castle, and that it appears to be the most numerous species on the Upper Dee. It is also found in summer throughout the temperate parts of the Old World; for I find it in Schrenck's 'List of the Birds of the Amoor,' Swinhoe's 'List of the Birds of China,' in Blyth's and Jerdon's Lists of the Birds of India, and we know that it may be enumerated among the avifaunæ of the northern portion of Persia and Africa. It is also equally abundant in all parts of North America, where, as with us, it is a summer visitant.

Such, then, is a brief history of the little Sand-Martin, the most hardy of the Swallow tribe which visits our island. Like the Swallow, it comes to us from Africa, sometimes in March; but these early visitors are few in number; indeed winged insects, upon which these birds solely live, are at this season very scarce, and quite insufficient to support a large number. These early birds frequent in preference the sunny sides of cliffs on our south coast, although sometimes they may be seen inland, flying over rivers and such sheltered places as are likely to supply them with an abundance of midges, gnats, and flies. By the early part of April their migration is completed.

The sexes are alike in colour, and may be thus described:—

Head, neck, back, and upper tail-coverts light brown; primaries and tail-feathers very dark brown; under surface white, crossed on the upper part of the breast by a band of hair-brown; beak nearly black; legs, toes, and claws purplish brown.

The young, from the time they emerge from the hole in which they have been bred, are very similarly but somewhat darker-coloured than the adults, and each feather is narrowly edged with grey.

The front represents the bird of the natural size, colony in the distance, and the English chicory, *Cichorium intybus*.