the genus Vidua with its allies, so as to make of them a subfamily Ploceinae, which in 1847 was raised by J. Cabanis to the rank of a family Ploceidae—a step the propriety of which has since been generally admitted, though the grounds for taking it are such as could not be held valid in any other order than that of Passeres. The Ploceidae are closely related to the Fringillidae (see Finch), and are now divided into two subfamilies, the Ploceinae and Viduinae, the former chiefly found in Africa and its islands, the latter in the Ethiopian, Australian and Indian regions.

Perhaps the most typical Ploceine weaver-bird is Hyphantornis cucullata, an African species, and it is to the Ethiopian Region that by far the greatest number of these birds belong, and in it they seem to attain their maximum of development. They are all small, with, generally speaking, a sparrow-like build; but in richness of colouring the males of some are very conspicuous -glowing in crimson, scarlet or golden-yellow, set off by jetblack, while the females are usually dull in hue. Some species build nests that are not very remarkable, except in being almost invariably domed-others (such as the most typical Indian weaver-bird, Ploceus baya) fabricate singular structures2 of closely and uniformly interwoven tendrils or fine roots, that often hang from the bough of a tree over water, and, starting with a solidly wrought rope, open out into a globular chamber, and then contract into a tube several inches in length, through which the birds effect their exit and entrance. But the most wonderful nests of all, and indeed the most wonderful built by birds, are those of the so-called sociable grosbeak, Philhetaerus socius, of Africa. These are composed wholly of grass, and are joined together to the number of 100 or 200-indeed 320 are said to have been found in one of these aggregated masses, which usually take the form of a gigantic mushroom,3 affording a home and nursery to many pairs of the birds which have been at the trouble of building it. These nests, however, have been so often described and figured by South African travellers that there is no need here to dilate longer on their marvels. It may be added that this species of weaver-bird, known to French writers as the Républicain, is of exceptionally dull plumage.

The group of widow-birds,4 Viduinae, is remarkable for the extraordinary growth of the tail-feathers in the males at the breeding-season. In the largest species, Vidua (sometimes called Chera) progne, the cock-bird, which, with the exception of a scarlet and buff bar on the upper wing-coverts, is wholly black, there is simply a great elongation of the rectrices; but in V. paradisea the form of the tail is quite unique. The middle pair of feathers have the webs greatly widened, and through the twisting of the shafts their inferior surfaces are vertically opposed. These feathers are comparatively short, and end in a hair-like filament. The hext pair are produced to the length of about a foot—the bird not being so big as a sparrow—and droop gracefully in the form of a sickle. But this is not all: each has attached to its base a hair-like filament of the same length as the feather, and this filament originally adhered to and ran along the margin of the outer web, only becoming detached when the feather is full grown.⁵ In another species, V. principalis, the middle two pairs of rectrices are equally elongated, but their webs are convex, and the outer pair contains the inner, so that when the margins of the two pairs are applied

WEAVER-BIRD, the name by which a group of between 200 and 300 species are now usually called, from the elaborately interwoven nests that many of them build, some of the structures being of the most marvellous kind. By the older systematists such of these birds as were then known were distributed among the genera Oriolus, Loxia, Emberiza and Fringilla; and it was G. L. Cuvier who in 1817 first brought together these dissevered forms, comprising them in a genus Ploceus. Since his time others have been referred to its neighbourhood, and especially

¹ First bestowed in this form apparently by J. F. Stephens in 1826 (G. Shaw's Gen. Zoology, xiv. pt. i. p. 34); but in 1782 J. Latham (Synopsis, i, p, 435) had called the "Troupiale du Sénégal" of Buffon the "weever oriole," from its habit of entwining the wires of the cage in which it was kept with such vegetable fibres as it could get and have in 1782 (Prolin appred it Oriolage toute toute. get, and hence in 1788 Gmelin named it *Oriolus textor*. In 1800 F. M. Daudin used the term "Tisserin" for several species of the Linnaean genus Loxia, and this was adopted some years later by Cuvier as the equivalent of his Ploceus, as mentioned in the text.

² These differ from those built by some of the ORIOLES (q.v.) and other birds, whose nests may be compared to pensile pockets, while those of these weaver-birds can best be likened to a stocking hung up by the "toe," with the "heel" enlarged to receive the eggs, while access and exit are obtained through the "leg."

3 But at a distance they may often be mistaken for a native hut,

with its grass-roof.

⁴ It has been ingeniously suggested that this name should be more correctly written Whydah bird—from the place on the West Coast of Africa so named; but Edwards, who in 1745 figured one of the species, states that he was informed that "the Portuguese call this bird the widow, from its colour and long train" (Nat. Hist. *Birds*, i. p. 86).

⁵ This curious structure was long ago described by Brisson (*Ornithologie*, iii. p. 123), and more recently by Strickland (*Contr. Ornithology* (1850), pp. 88 and 149, pl. 59).

a sort of cylinder is formed. The females of all the widow-birds differ greatly in appearance from the males, and are generally

differ greatly in appearance from the males, and are generally clothed in a plumage of mottled brown.

Usually classed with the weaver-birds is a vast group of small seed-eating forms, often called Spermestinae, but for which Estreldinae would seem to be a more fitting name. These comprehend the numerous species so commonly seen in cages, and known as amadavats, Estrelda amandava, nutmeg-birds, Munia punctularia, wax-bills, Pytelia melba and phoenicoptera, cutthroats, Amadina fasciata, the Java sparrow, Munia oryzivora and many others. Many of these genera are common to Africa and India, and some also to Australia.

(A. N.)