Falcunculus frontatus whitei.

By Gregory M. Mathews, F.R.S. (Edin.), Watford, England. (Coloured Plate D.)

(Falcunculus whitei (Campbell), Emu, vol. x., p. 167.)

The examination of the type of this sub-species has afforded me much pleasure. Unfortunately, this is a young bird, and the features of the sub-species are somewhat obscure. However, it seems certain that this bird differs from the eastern F. frontatus in its browner colouration, thereby approaching the Western F. leucogaster. As Mr. Campbell notes, it seems to have the upper colouration of the latter with the under colouration of the former. Its small size is, however, due to immaturity, and I feel convinced the fully adult will more probably equal the other two sub-species.

As I treat them trinomially, the three forms will be— Falcunculus frontatus frontatus (Latham), East Australia.

,, whitei (Campbell), North-West Australia.
,, leucogaster (Gould), South-West Australia.

By means of this nomenclature we are enabled at once to recognize the affinities of the three forms.

The discovery of this bird is of extreme interest, as before its recognition the Western sub-species had been considered so isolated and distinct. Mr. Campbell drew attention to its smaller size, and it would be as well to here draw attention to the bird described by Gould as Falcunculus flavigulus in the Syn. B. Austr., part iv., App., p. 2 (1838), from Australia. The chief features were its small size:—Wing, $3\frac{2}{8}$; tail, $2\frac{7}{8}$; tarsus, $\frac{3}{4}$. Colouration of the wings brownish-grey, margined with pale brown; tail the same; entire under surface yellow. Gould later reduced this doubtfully as a synonym of F. frontatus, querying it as a young bird. I have no specimen here that agrees with this diagnosis, and therefore can only ask Australian ornithologists to solve the problem and fix F. flavigulus in its proper place.

Honey-eaters of the Cleveland District, Tasmania.

By (Miss) J. A. Fletcher, R.A.O.U.

The forests surrounding Cleveland are composed chiefly of banksias, white gum and stringy-bark (eucalypts), and wattle (Acacia) trees. These in many places have a tangled undergrowth of mimosa, bracken, and pimelea. This latter has the extraordinary local name of "snakes' bread and butter," but how such a name arose I could never ascertain. On the more barren sandy rises many flowering herbaceous plants thrive, the whole forming a splendid hunting-ground for Honey-eaters. I identified the following species (all, by the way, that are endemic to Tasmania), and in most instances observed their nests and eggs

Strong-billed Honey-eater (Melithreptus validirostris).—Though I observed these birds in the district, I was not able to watch them at all, and only once came across a nest, which was, however, destroyed before completion. The birds were sometimes to be seen perched on the telegraph wires, but, as a rule, I consider them rare in the district.

species, like its forerunner, is rather scarce, several pairs only This **Black-headed Honey-eater** (Melithreptus melanocephalus).—being seen in certain favoured localities where were a few acres of gum saplings. I found one nest built at the end of a pendulous branch, but, alas! the Crows also found and destroyed it. The Honey-eaters forsook the locality.

Fulvous-fronted Honey-eater (Glycyphila fulvifrons). — I was interested to find this little bird in our district, but it was very local. It was only seen in a limited area of banksia scrub which extended along the railway line for a few miles. Owing to its shy, almost mouse-like nature, observation of its habits without field-glasses was difficult, for it invariably flitted out of sight amongst the undergrowth as soon as a near inspection was made. I was pleased to record it for our district, because I believe it generally prefers the banksian and boobyalla areas around the coasts.

Whilst spending the last Christmas holidays at Swansea, on the East Coast, I frequently flushed these birds from the shrubs on the sand-hills.

At Cleveland I discovered the nest of this species twice. examining the railway banksias I noticed a nest in the heart of On parting the branches a Fulvous Honey-eater slipped quickly off and disappeared through the twigs on the other side. The nest was deep, and made of strips of a wild "thyme," which is the favourite nesting material of most of the birds in this dis-The inside was lined with soft shredded bark, also having some cocoons and feathers interwoven. This snug cradle contained two eggs. Date, 10th October, 1008. The following year (30/10/09), I found another nest of same species a few yards away from the site of the above, but the ragged nest showed that a tragedy had taken place. From appearances the brooding bird had been torn off her nest, most likely during the night. Feathers on the ground below showed what had been her end. nest was just above easy inspection, I climbed up, and when examining the torn-up lining was amazed to discover the two eggs still there unharmed.

Yellow-throated Honey-eater (Ptilotis flavigularis).—This merry bird was most plentiful, and more particularly so on the lighter-timbered belts towards Epping, where, among the brackens, it seems to spend a happy time. The nests were easily found, sometimes several within a few yards of one another. The situations varied from the low centre of a sword-grass clump to the top of a native cherry tree, from a fallen tangle of twigs to the thick green growth surrounding a burnt gum trunk, in one instance quite 20 feet high.

On one occasion a Pallid Cuckoo's (Cuculus pallidus) egg was placed in the nest just prior to the Honey-eater's eggs hatching, and on another after the first egg was laid.

I have watched the male bird feeding his sitting mate. He called to her as he approached; she answered with a purring sound, hopped on to a twig near the nest, received the food he brought, and returned to her charge, while he flew away.

When one bird is sitting the other keeps near the locality, and by its frequent and excited callings gives a good idea as to the whereabouts of its nest. They are close sitters, but, owing to the open and careless situations in which the little home is frequently placed, these birds suffer severely from predatory enemies.

Crescent Honey-eater (Meliornis australasiana).—Also plentiful, in situations similar to the preceding birds. Most of the Crescents' nests I found were placed in centre of sword-grass clumps in a damp locality. Two nests I found on 10th October, 1909, were quite close to one another, and near, in other tussocks, were the ruins of the last year's homes. From the first nest the female flew, then fluttered on the ground, apparently in great distress. I left her and examined the cradle she had left. It contained a chipped egg and two recently-hatched young—blind, and naked except for tufts of greyish down on top of head, tips of wings, and on the abdomen. When the female bird saw her efforts were in vain, she, to my great astonishment, picked up, or, rather, snapped up, a minute fly, and returned to the nest, giving the morsel to one of the little ones, then covered them. And all the while my sister and I were standing by the clump.

A yard or two away I found another nest containing three young covered with down and with their wing feathers showing. Their parents were away, and did not return while their young were being inspected.

White-bearded Honey-eater (Meliornis novæ-hollandiæ).—These lively and entertaining birds were particularly fond of one locality—a range of low, rocky hills, sparsely covered near their summits with sheoaks (Casuarina) and black wattle (Acacia), while around their bases grew a tangle of banksia and saplings, the ground underneath being hidden by bracken.

The chief nesting-sites of the White-bearded Honey-eaters were among the silky foliage of the sheoaks, but the banksia and mimosa were also chosen. Though their nests are generally hard to detect, they nevertheless constantly have them robbed or destroyed by other birds.

Spinebill (Acanthorhynchus tenuirostris).—These charming little birds often visited the flower gardens in the township in search of honey, but I seldom came across them in the bush. In fact, it was only in the hills mentioned in previous paragraph that I saw them, and once, on 9th November, 1908, I noticed a nest containing two eggs.

Miner (Myzantha (Manorhina) garrula).—This part of Tasmania appears to be one of the strongholds of this species, consequently they are very numerous. In whatever direction a ramble is taken, the jolly Miners are sure to be there, though very often their persistent alarum cries create a strong dislike in the mind of the observer to his grey-feathered watchers. In several parts of this district were tracts of country so barren of bird-life that I called them "Saharas." Strange that these should be the chief nesting districts of the Magpie (Gymnorhina hyperleucus) and the Miner. Generally, a nest of each bird was in the same tree.

Last season two Miners drove a pair of Yellow Wattle-Birds from their partly-finished nest, padded it a little more, and occupied it. The pair of eggs laid was remarkably long for Miners'.

For the last three winters a flock of 30 Miners came regularly to the kitchen window for food. After a while the more venture-some ones flew on to the table and took food there. Once three perched on my sister's hand and ate the crumbs from her palm. By August, however, the call of the wild life was too strong, and all departed.

Yellow Wattle-Bird (Acanthochæra inauris). Brush Wattle-Bird (Acanthochæra mellivora).—Both species of Wattle-Birds are constant residents of our banksian tracts, though the latter is in greater numbers. My experiences with them at Cleveland tend to show that they are very local—that is, one pair will generally be found in its favourite hunting-ground throughout the year. When the banksia blooms were exhausted the flowers of the white gum or stringy-bark were resorted to. In the cracks and crevices of the black wattles they often obtained the tiny black beetles, of which they seem very fond.

During nesting season Hawks, Crows, and Butcher-Birds were relentlessly chevied from the special group of trees. The loud call of the Wattle-Birds made the finding of the nest an easy matter, and even before the season commenced it was possible to note the location where in all probability the home would be built.

The winter and early spring of 1910 proved an exception to the three former years. Both species of Acanthochæra suddenly left the district, and did not return until the third week of October, when their noisy voices made the forest lively again. As the year 1910 was, according to residents of Cleveland, the wettest for 26 years, this would probably be the reason, particularly as the banksia blooms failed. Nesting operations were therefore very late compared to the previous year, the earliest record of which showed Brush Wattle-Bird's nest with two eggs found on 10th September. One could not help noticing how untidily made were the nests found last season. I suppose the late return of the birds to their nesting haunts was the cause. I remember noticing three nests during the third week of November last. So untidy and neglected was their appearance that I mentally classed them as

old or deserted. A climb up the trees revealed in one a beautiful pair of Wattle-Bird eggs, and of the other two one contained two eggs of the Brush Wattle-Bird, while the second had a pair of young with a little down upon them.

During one ramble in the past season I found a nest of the Brush Wattle-Bird with three fully-fledged young ones. One

seldom comes across three in a clutch.

In all the nests of the Yellow Wattle-Bird which I have found the builders have exhibited a great fancy for sheep's wool, not as lining, but in the construction of the nests; and it was woven in most untidily. Pieces of all lengths and sizes could ofttimes be seen hanging from sides and bottom, the sterner fabric of the nest being branchlets of wild "thyme," with shredded bark and fine rootlets for the lining. Only in one instance did I find a Brush Wattle-Bird using wool as building material. This species delights in soft shredded bark as the inner lining, which is built into a framework of "thyme" twigs. Both species of birds are very "touchy," and they frequently desert their nest if it is inspected during the process of building. Twice last season there came under my notice the remarkable instance of the Brush Wattle-Bird removing the nest completely because it had been touched by me. The first nest was taken piece by piece and rebuilt some distance off. The second nest removed was added to the top of another nest in the next tree, the whole forming a most remarkable structure. In the bowl of this strange pyramid the usual pair of eggs was laid.

Both species are close sitters, and do not readily leave their nests. In fact, when sitting on chipping eggs or young they will almost permit of being touched by the hand. They fly off with a quick, nervous call, to which the mate speedily answers.

Both male and female birds assist in the incubation of the eggs, which, from my observations, lasts 12 days, and also in the feeding of the nestlings. I also noted the second egg was laid after the interval of a day, and the bird generally commences to sit that evening. Three weeks was the longest period which I observed a finished nest to be left before it was used, but generally only a few days pass ere the first egg is laid.

These general observations, unless specially mentioned under a particular species, refer to both Wattle-Birds. I believe the sitting bird is fed while on the nest by its mate, but could not say with certainty.

Food of Cockatoos. — The Chief Inspector of Fisheries and Game in Melbourne (Major Semmens) would like to know from country members what is the principal food of Cockatoos throughout the year. His address is Railway Buildings, Flinders-street. He wishes to find out whether the good they do in eating the roots of detrimental plants, such as the *Romulea* or onion weed, &c., is compensated by the damage they do in eating freshly-sown grain.