by the approach of a stranger the happy notes of industry and sociability give place, especially in the whitehead, to a harsh chattering cry, while the birds themselves descend to the lower branches to interrogate the intruder.

The brown creeper is smaller, with longer tail, and all the upper parts, nape, and back a deep and beautiful brown colour, contrasting somewhat sharply with the uniform whiteness of the breast and underparts. This little bird is confined to the South Island, in a few areas of which its busy flocks may still be seen in almost any patch of bush. The three birds just mentioned are all essentially forest-birds, and their economic value is to be translated in terms of forestry alone. Their nests are placed almost invariably in the deeper bush, and it will scarcely be necessary to describe them here. It is surely obvious that any nest found in the depths of the forest should, by virtue of its position, be sacred from the attacks of those who, for reward, collect birds' eggs. The only legitimate prey of such collectors is the eggs of the house-sparrow, which never nests far from settlement.

## THE FERN-BIRD.

The fern-bird (Bowdleria punctata Q. and G.), the next bird on our list, is one of those peculiar recluse species confined to a particular habitat—namely, the densest swamp and the thickest bracken of the hillsides. In the latter locality it is less frequent than its name would imply. Unfortunately, the writers possess little exact information concerning the food habits of this bird, beyond the indisputable fact that it is practically entirely insectivorous. The almost total absence of many of the indigenous swamp-birds, including the fern-bird, or "swamp-robin" as it is called in the North Auckland district, from most of our phormium areas, coupled with the increased damage to the phormium-fibre industry by insect pests, renders it not improbable that a little investigation into the case of the fern-bird would be of some economic interest.

## THE PIED AND THE BLACK FANTAILS.

In Europe a summer scene would be manifestly incomplete without one or two birds of the swallow family with their familiar flight, hawking for insects almost from ground-level to the upper atmosphere. The swallows and martins are among the most aerial of birds, taking their prey almost entirely on the wing, and taking it, moreover, among such insects as mosquitoes, which inflict supreme annoyance on man. L. Pasqualis (1915) pointed out that "so long as swallows are to be found in Venice there is no annoyance from mosquitoes, but when the birds migrate late in July these insects appear in swarms." But the use of swallows in Italy was recognized long before this date. We are told (Balfour, 1914) that somewhere between 1790 and 1812 the Commune of Marsciano, Umbria, "asked for a papal decree prohibiting the killing of nesting swallows for food because their destruction brought about insalubrity in the region, one reason being that the swallows feed on the small flying-insects so troublesome and hurtful to man and beast." And this was before the relation between mosquitoes and malaria had been discovered.

We in parts of New Zealand are troubled with numerous flyinginsects—mosquitoes and sandflies—and in the absence of all birds of