disturbed my investigation of a Martin's nest on a river-bank. He was furious at my breaking into the home of a sacred bird, and seemed resolved that I must stay my hand or drop below into the river. A strange altercation ensued, during which I was only able to use the words "Ispravink" and "Musée" ("Police" and "Museum") in defence. These had the desired effect, however, and he went away in great wrath. Even the hospitable Chief of Police, whose guests we were, was not anxious to satisfy such enthusiasm. It could not be done in daylight, even for scientific purposes, and, as we had a sun that did not fully set, there seemed to be no opportunity for us. After a week's stay, we were accommodated with the services of a peasant and a ladder, and finally witnessed and handled the real things-eggs, nest, adult bird, rafters; even the atmosphere was there. The young were just leaving the nest. One fully-fledged bird was miserably thin; there was scarcely any fatty tissue about its body, and the sternum was only covered with dwarfed muscles. A second young bird was particularly fat.

These birds congregate in large numbers, but do not breed in close company. They fly quickly, and have a single shrill note. The bird has a strong grasp (with its four toes in the same plane), which is enough to pierce the fingers and draw blood. The nest consists of a few straws and feathers cemented by saliva. The eggs were two or three to a clutch. The parents occasionally worry the feather-bred Swallows which associate with them in nesting. This species was not met with lower down the river than Yakutsk. From 40° S. in Victoria to 62° N. in Siberia is a long fly. The period of flight from the time of leaving the south in early autumn to the time of arriving in the Japan Sea could be gauged if only some ornithologist had the date of leaving Victoria

in 1903.

The illustration shows the outer verandah of the market square in Yakutsk, under which Apus (Micropus) pacificus, Lath., had built many small and strangely constituted nests. The negative is by the Czar's officer, Mons. Zooyef, Governor of Olekminsk.

Stray Feathers.

NEW FOSTER-PARENTS.—In a recent letter received from Mr. C. M'Lennan, Carina, Victoria, he named *Hylacola cauta* and *Malurus melanotus* as new foster-parents for *Chalcococcyx plagosus.*—F. E. HOWE. Albert Park (Vic.), 10/12/08.

RHIPIDURA DRYAS (Math., Handl., p. 65).—I received this bird in a small collection of skins sent me from near Wyndham, N.W. Austrália, by Mr. J. P. Rogers. I think this is a new locality for this species.—GREGORY M. MATHEWS. Watford, England.



Young Stone-Plovers (Burhinus grallarius) "Planting."

ROM A PHOTO. BY HARRY BURRELL.

CORCORAX.—I have confirmed the fact that two females at least of *Corcorax melanorhamphus* lay in one nest. I examined a nest on Wednesday (7/10/08) just before sunset, and found it empty but ready for eggs; examined it again following Saturday and found *five eggs* of two distinct types.—H. L. WHITE.

BIRD ROBBERS.—One day in October, 1897, while wandering through gums and bull-oaks at Springvale, I noticed an Orangewinged Tree-runner (Sittella chrysoptera) carrying something in its bill. Tracing it to a high fork in a bull-oak (Casuarina), I found it was nest-building. But the bird had not been long away on the search for more material before a Little Tit (Acanthiza nana) appeared and began to tug violently at some of the fibrous part of the Tree-runner's nest. It dislodged a piece and carried it off to its own nest not far away. This is the only instance of the kind I have ever noticed among native birds.—A. G. CAMPBELL. Pomonal, Victoria.

STONE - PLOVERS (Burhinus grallarius) SHINGLE.—Having received two young birds from a friend as a donation towards my collection, I at once placed them in the aviary. Soon after, on my approaching them, I was struck with the quaint and peculiar attitude they fell into. One would think at times the earth had gaped and swallowed the pair; the similarity of colour in plumage and site selected for squatting by the birds would deceive the trained eye of a pot-hunter. It is the only means of concealment provided by nature against the searching eye of their greatest enemy, the Wedge-tailed Eagle (Uroaëtus audax). I photographed them as a study in colour protection. Although not in their natural haunts, they were very wild at the time, as depicted by the expression of fear and the outstretched attitude on the shingle. They have now become very docile, and never attempt to pose as per photo.-HARRY BURRELL. Manilla, New South Wales, 23/11/08.

More New Foster-Parents. — Acanthiza uropygialias is among the foster-parents of Chalcococcyx basalis. I took a nest on Wednesday last (28/10/08) containing two eggs of Acanthiza and the Cuckoo's egg, all fresh. The nest was situated about 12 feet from the ground, in a dead bull-oak stump. The softer white wood had decayed and fallen away, leaving a shell outside about ½-inch thick, and a space of about 1½ inches between it and the heart of the tree. A strip about an inch wide was broken out, just giving nice clearance for the birds, and the opening in the nest could be seen. Last year, on 6th October,

I took an egg of *Mesocalius palliolatus* from the nest of *Acanthiza pyrrhopygia*. The nest was situated in a thick green bush, about 18 inches from the ground, and was only discovered by seeing the bird flush. The nest did not contain any eggs of the Tit, so I left it for several days before taking the Cuckoo's egg, which was then partly incubated.—P. T. SANDLAND. Balah, viâ Kooringa (S.A.), 30/10/08.

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MALURUS FIGHTING ITS SHADOW .- Referring to the note with this heading in The Emu, vol. viii., part 2, the following note of mine dated 28th July, 1893, may be of interest. The birds were Malurus cyaneus, the locality Adelaide:-Hearing some taps at my window, I looked up and saw a male and female Malurus flying at it. At first I thought they were trying to catch a small sort of fly on the other side of the glass, but as they continued doing this for about a week, off and on, I think the male must have been trying to attack his image in the glass, especially as the small flies could not always be seen at the spot to which he flew, and when he changed his position in the twigs of a tree in front of the window he usually flew to a different spot. against this was the fact that he always flew up about 9 inches instead of horizontally forward. The female usually sits on a twig watching him, and very rarely flies to the window. one occasion I opened the window at top and bottom. Twentyeight times the male flew on to the top of it, looked into the room, and then hopped back to his mate, while the hen only did it twice. Each seemed frightened to go in without the other. At last the male flew in below and at a looking-glass placed on the window-sill. Then, flying up, he flew on to the inside of the window, and, dashing against the pane, had to be caught and placed outside.—(DR.) J. BURTON CLELAND. Perth, W.A.

EMUS AND BRUSH-TURKEYS IN ENGLAND.—It has been suggested to me that the notes which follow will be of interest to Australians. My uncle, Sir Edmund Loder, of Leonardslee, Horsham, Sussex, England, has upon his estate a reserve of some 300 acres of forest, securely fenced, in which he has endeavoured to acclimatize numerous animals and birds brought by him from various parts of the world. Beavers, capibara, &c., exist together with kangaroo and Emu. The Emus have successfully reared more than one brood of chicks, which when old enough are eagerly sought by zoological societies in England. The male Emu does all the sitting, and the female was so careless or aggressive during incubation that it was found expedient to shut her up away from her mate and her progeny.

A pair of Brush-Turkeys (Catheturus) are in the park also.

The male was very industrious in scraping up earth and vegetable débris into an egg-mound, which he attended regularly. When cold he scraped on more litter, and in the warm weather took some off. The keepers, not knowing the habits of the young, were nonplussed by their bolting into the coppice, for they are able to fly as soon as hatched. It is feared that the majority perished of cold or fell a prey to some marauding animal. Two or three were captured, however, and lived to be full grown. The next season an enclosure was put about the the mound, but whether the season was too cold, or whether the male was not able to give proper attention to the mound, no chicks were hatched out that season.—E. T. Hubbard. Glenorchy, Tasmania.

ST. PATRICK'S RIVER (TASMANIA) NOTE.—During the early part of November I had the good fortune to spend a short holiday at St. Patrick's River, in the Patersonia district. place at which I stayed was about 2 miles north and slightly to the west of where the A.O.U. had their camp-out after the last I found bird-life fairly plentiful, but some Hobart session. species entirely absent that were noted round Prestidge's during the camp-out. Thirty-five species were listed, as against eighteen mentioned as having been noted by the members, who were camped practically at the foot of Mt. Barrow. I have listed twenty-one species not mentioned in the account of the trip, and the campers saw six species not noted by myself. It is rather curious there should be such a difference in the lists when the distance between the two places is so small. Certainly the character of the country at St. Patrick's River is somewhat different to that round the foot of Mt. Barrow, being in places more open, with small, lightly-wooded flats along the river, and the hills were not too heavily encumbered with undergrowth. Where I was staying the Flame-breasted Robin (Petræca phænicea) was very plentiful, and three nests were found. Not a single specimen of the Scarlet-breasted Robin (P. leggii), noted so plentifully round Prestidge's, was to be seen. The Pink-breasted species (P. rhodinogastra) was recorded from Prestidge's, but I cannot do the same for it for St. Patrick's. Take another It is recorded species of Robin, the Dusky (P. vittata). by the campers, and I also have seen it plentifully in the same locality, whereas at St. Patrick's I found it very scarce. I noticed a nest of the Yellow-throated Honey-eater (Ptilotis flavigularis), containing three eggs, in a somewhat uncommon position—i.e., in a tea-tree overhanging the river, some 10 feet from the surface. It was only discovered by seeing the birds fly in and out of the bush. As a tree that had fallen into the river had drifted under the nest, I was able, at the risk of a ducking, to crawl along to the nest and investigate. The eggs

differed somewhat from the usual type, being heavily banded with spots round the larger end. Another nest, containing two eggs, was found in the centre of a clump of band-grass, some 6 inches from the ground.—FRANK M. LITTLER. Launceston, 28/11/08.

TASMANIAN NOTES.—My friend, Mr. H. C. Thompson, of Launceston, has sent the following notes made in the brief

intervals of a busy life:—

"The Scarlet-breasted Robin (Petraca leggii) had three eggs on 6th September, and on 11th September a Flame-breasted Robin (P. phænicea) was sitting on three eggs in her nest built in Owen's timber yard on the Tamar, amid all the whirr of machinery and rending of logs. Probably the same pair built last spring on a rafter in a pole-shed situated in the Council's yard, Launceston, so they are not averse to the society of the working man. Two Brown-tails' (Acanthiza diemenensis) nests and several Yellow-tails' (A chrysorrhoa), with eggs, were found at beginning of September. In a few reeds in the Depôt grounds were two pairs of Grass-Birds (Megalurus gramineus), also a fine pair of Bald-Coots (*Porphyrio melanonotus*) about the same place. The latter were very tame; one was resting on some bent reeds only a few yards from me, preening its feathers and taking no notice of me, not even when I stood up and got as close as the water would permit. When I projected a small missile into the water near him he flew very clumsily, with the legs hanging straight down, giving him an awkward appearance on the wing." letter dated 1st November Mr. Thompson mentions that a third Coot had joined these two, one of which was sitting on five eggs, so it is evidently a case of a ménage à trois, one of those mysterious associations of three individuals which have been observed in the "old country" in several species, and discussed in the nature journals without eliciting any very satisfactory explanation. "The Reed-Warblers (Acrocephalus australis) arrived at the North Esk about the middle of September. Several Yellowthroated Honey-eaters' (Ptilotis flavigularis) nests were found built close to the ground in saggs on the side of a tree-clad hill, three of them having eggs by the 4th October. Some of the Robins had fledged young about the same time. Bronze-Cuckoos (Chalcococcyx plagosus) were making their voices heard; and both the Grey-tailed Thickhead (Pachycephala glaucura) and the Spinebill (Acanthorhynchus tenuirostris) were sitting. Shining Fycatchers (Piezorhynchus nitidus) had been seen by that date, although one or two pairs are generally located near Launceston each spring." On 18th October Mr. Thompson and his son left home at 5.30 a.m. and went down the Tamar in a small boat, the wind southerly and cold until the sun got well up. At 8 a.m. they were at Tamar Island, and breakfasted in the

boat, as the tide was too low to allow of landing, on account of the mud-flats. After breakfast they landed and walked over the island, finding Reed-Warblers, Grass-Birds, Crescent Honeyeaters (Meliornis australasiana), and Swift-Lorikeets (Nanodes discolor). They then boated to the other side, and, landing, walked to some flats, where they found several Bald-Coots' nests, some with eggs, also a Swamp-Hawk (Circus gouldi) sitting. She would not allow them to approach very near, but took flight, rising high and then circling round with the wings quite motionless.—H. STUART DOVE. Moonee Ponds, 14/11/08.

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NOTES ON THE BLACK-FACED CUCKOO-SHRIKE (Graucalus melanops, Latham).—This fine insectivorous bird generally makes its appearance in the Hawthorn district each year about the end of March, and is to be seen during the day searching amongst the leaves and beneath the bark of trees for caterpillars, spiders, beetles, &c. One morning in March last my attention was drawn to one of these birds which was struggling to remove from the bark of a large red gum tree (Eucaylptus rostrata) a case of one of the case-moths (Psychidæ). cases require rather a smart jerk to dislodge them from the bark or twig they are attached to. Knowing that most of these stickcases contained fine fat larvæ, I was curious to see, firstly, if the bird was capable of removing the case from its fastening, and, secondly, how it would get the larva out of its stout covering if successful. I will now give a brief account of how the bird succeeded in doing this. Taking hold of the case with its beak by the lower end, and at the same time clinging firmly to the bark by its feet, by a series of short, sharp jerks, continued for some time, to my surprise it succeeded in removing it, when, flying off to an adjacent tree, carrying the case in its bill, it started to beat it, first to the right and then to the left, against a bough. After performing this operation for some considerable time, these continuous shocks were the means of driving the grub up into the neck of the case, when another dose or two of the same medicine forced it in a stunned condition to partly leave the case. Then, flying to the ground, carrying the case with it, the bird seized the grub, and, returning to a bough, By the congave it a smart rap, thus dislodging its prey. tinuous tapping that was going on amongst the trees it was evident these birds were doing yeoman service. The Cuckoo-Shrike does good work in an apple orchard by eating the larvæ of the painted apple moth (Teia anartoides, Walk.), also another caterpillar similar in its habits to the above, but much larger, and very destructive to the foliage of the apple tree. Early settlers in the Melbourne district used to call this bird the Blue Jay or Banded Thickhead, and in the Warragul district, Gippsland, it was known as the Blue Pigeon. One characteristic action very noticeable in this bird is that upon alighting it never fails to lift first one wing and then the other, as if the first closing of the wings did not suit it. Although insectivorous, at times it likes a change of diet, and is very fond of berries, especially the fruit of the olive. I have seen these birds strip a large olive tree in a few days. Many years ago, while shooting in a paddock at Hawthorn, I came upon a flock of these birds fossicking around the dried-up carcass of a dead cow. examining the carcass I found that they had been feeding upon what they could manage to pick from the ribs. Upon shooting one, I found that the stomach contained, besides rib pickings, several insects belonging to the order of Coleoptera.

Before concluding, I may mention that upon dissecting a Grey Crow-Shrike (Strepera cuneicaudata, Vieill.), shot a few weeks ago in this district, the stomach contained scores of the large brown bull-ant, well known to those who have accidentally rested upon one of their mounds. This bird had collected them while they were moving up and down the trees in quest of food.

—C. F. COLE. Melbourne.

NOTES ON SEVERAL BIRDS FOUND AT STRELLEY RIVER (Pt. Hedland, Marble Bar Road), N.W. Australia.— Merops ornatus.—Congregation in Clusters at Night.—August, 1907.—Numerous, sailing round water-holes catching wasps, &c. Found them congregating together at night, usually flying from various parts to one particular spot, and roosting together in low gums. They sat in rows close together, as many as seven or eight being counted in one row. Twenty or thirty were seen thus roosting for several nights in one particular sapling. the nights were very cold, this may have been for warmth, or it may have been the congregating together before proceeding south. In September and October much fewer birds were seen, and these usually in pairs, the rest having evidently gone south. These pairs were nesting. 22nd September.—Nest in sandbank, about 3 feet in; four eggs with young birds forming, laid on the sand at the end of the tunnel, where was a small dilatation. A few small land-snail shells and wasps' wings formed a nest.

Habits of Ptilotis carteri (kindly identified by Mr. Milligan from skins).—August-October, 1907.—A very common Honeyeater amongst the eucalypts and tea-tree along the Strelley and Resembles very closely in appearance P. Shaw Rivers. penicillata, but of a brighter yellow. In nearly all specimens a very distinct blackish pre-auricular tuft of feathers. Habits almost identical with P. penicillata—the same way of flying and dodging amongst the trees, the same aggressiveness in attacking other birds, such as Grallina and Rhipidura. In this way and by the chattering of a number of these Honey-eaters I was attracted to an Owl hidden in the leaves of a tree. The notes of the birds are identical, from the usual one to an occasional clear liquid whistle. Occasionally, just as does *P. penicillata*, a bird will be seen to mount into the air by a series of ladder-like rises, meanwhile uttering a peculiar liquid note, and then suddenly dive down into the bushes. Middle of August.—Nest with two fledged young in bulrushes over water. September.—Old nest in paper-bark tea-tree (*Melaleuca*), about 15 feet high, near main stem. 23rd September.—Nest in overhanging branch of eucalypt, about 8 feet from ground, with two fresh

eggs.

Nest and Eggs of Emblema picta.—On 11th August Mr. H. M. Giles, F.E.S., my companion, found the nest of this rare species by the female flying out of it. Later on we secured the female on the nest. There was an unfledged nestling and two eggs, both of which we succeeded in blowing, the young bird The nest, composed of grasses, was being preserved also. situated in a coarse tuft of spinifex (Triodia), not far from a dry watercourse. In the photograph* the orifice of the nest in the tuft of spinifex can be seen. The nest has been deposited in the Western Australian Museum. Mouth of nest consists of fine flowering ends of spinifex (Triodia). Body of nest-about size of closed fist-buried in the spinifex tuft, and composed of woolly tufts of hair and woolly leaves of plants to form a compact nest. Eggs.—Colour pure white; with lens, surface has a dull gloss with occasional small pits. Shape, roundish oval, one egg larger than other; size, in lines (12 lines to inch), 6.1 x 5, 6.8 x 5.4.—(Dr.) J. Burton Cleland. Perth, W.A.

From Magazines, &c.

Wood-Swallows Breeding in Captivity.—In The Avicultural Magazine for September Mr. E. J. Brook has some notes on the breeding of the White-browed Wood-Swallow (Artamus superciliosus) in his aviary. The birds nested in a piece of tree-root with a rotten, cup-shaped hollow, in which they placed a few very small sticks, but made no regular nest. Of three eggs laid the first proved clear; the second, laid three days later, was broken; while the third, laid after an interval of four days, was successfully hatched. "Both birds sat, relieving each other at short intervals. The egg hatched on the 14th day, I think, and the young bird left the nest 14 days later. Both parent birds fed the young one, but the male was the best feeder, and much the keenest to find tit-bits, such as small flies, &c.

^{*} Dr. Cleland kindly sent a photograph of the nest in situ, but as the picture was evidently taken under difficulties it was not suitable for reproduction.—Eds.