an old nest of the White-winged Chough is very unusual. There is a record of a pair which built in a Magpie's old unused nest.

In the same paddock, and less than two hundred yards away from where the Frogmouth was nesting, a pair of Black-faced Cuckoo-Shrikes (Coracina novæ-hollandiæ) was using an old weather-beaten nest of the Magpie Lark (Grallina cyanoleuca) as a site for their own nest. They had covered the top of the mud nest with a thin layer of their own nesting material, and when found they had hatched out three young ones. Ten days later, when I went to photograph the nest, I found the young ones had developed very rapidly and were within a few days of leaving the nest. When arranging the camera in a suitable position two of the young ones became alarmed and flew out into the surrounding trees, but the youngest and weakest one remained and I was able to secure a photograph of it and the nest.—D. J. DICKINSON, R.A.O.U., Melbourne.

## Stray Feathers

A Swift Weather-bound.—During a visit to the Bogong High Plains in the Christmas holidays, 1929, a Spine-tailed Swift (*Hirundapus caudacutus*) was observed in the following circumstances not far from the summit of Mount Fainter, which has an altitude of 6160 feet above sea level. after two days of very heavy fog and rain, and as we were

The morning of December 29 proved to be quite fine following the cattle pad around the end of the Fainter Range at about 11 a.m. we saw the Swift sitting close to the track in the very stunted scrub (not more than 9 inches to 1 foot in height) which covers the ground at those altitudes.

The track at this part swings round to the right in the lee of the range, and it is just possible the bird may have been sheltering from the coming storm notwithstanding the fact that it was not actually covered by the scrub. The bird did not appear to be injured in any way nor was it a sick bird. It was perfectly visible and the whole seven of us were able to approach to within two or three feet; the bird, though alarmed, made no effort whatever to escape. We have been told that no record of a nest of this bird in Australia has yet been obtained, nor are there any definite records of the species settling to rest at night. Near the same spot we found the nest of a Pipit (Anthus australis) containing three young, in the snow grass.—(MISS) A. PATERSON, Melbourne. Communicated by A. G. CAMPBELL, R.A.O.U., Kilsyth.

Andreas Reischek.—The name of Reischek has often been quoted by Australian writers in connection with his observations on sea birds inhabiting islands off the coast of New Zealand. The travels of this Austrian naturalist, who resided in New Zealand for twelve years, were practically unknown until the publications of his Yesterdays in New Zealand, where the whole of his exploits in the Dominions are recorded in detail. The object of this belated work—nearly thirty years after the author's death—is to revive interest in the memory if this dauntless naturalist, who did such valuable pioneering work in New Zealand over forty years ago.

Andreas Reischek was born of poor parentage in the country town of Linz on the Danube in 1845, and at an early age was apprenticed to a baker who was keenly fond of outdoor life and often took the boy on excursions into the country. It was about this time that the boy developed a deep interest in natural history, a pursuit which he followed until the end of his life. In 1866, after the war in Tyrol in which he was engaged, he travelled through parts of Italy and other countries, and about 1875 he had the good fortune to receive the recommendation of the famous geologist, Ferdinand Hochstetter, for the arranging of the collections in the newly built Museum in Christchurch, N.Z., which was then under the directorship of Sir Julius Von Haast.

Reischek left Vienna on February 7, 1877, and after passing through Melbourne (where he met Baron Von Mueller). reached Dunedin on April 20. The collections were speedily arranged for the opening date, and Reischek received numerous congratulations for the manner and skill in which he had arranged many of the groups. Reischek then began to devote his time to collecting specimens in the country surrounding Christchurch, and at the end of the year he commenced his first expedition of importance into the little settled country west of Christchurch. The trip seemed to have inspired in him the feeling for further adventures, and in February, 1878, he set out on an arduous trip to explore the Southern Alps, where the travelling conditions were From then onwards he undertook trips very strenuous. of this kind at least twice a year, and often his only companion was his faithful dog Cæsar. At the request of Sir Walter Buller, who was about to bring out a second edition of his Birds of New Zealand. Reischek paid no fewer than three visits to the Little Barrier in search of the Stitch Bird, and was successful in procuring a few specimens.

On another excursion, in which more than average courage was required, Reischek gained admittance into the King Country, which was then the Maori stronghold and where white men were prohibited from entering. After

convincing King Tawhiao that he was only in search of natural history specimens, he was granted permission to enter and was given guides to assist him in his explorations. On all his excursions Reischek collected all kinds of objects, and during his trip through this territory he amassed a splendid collection of ethnographical specimens. Many greenstone axes and implements were recovered from caves which had once served as camping places for the Maoris.

From April to October, 1884, he was camped at Dusky Sound, where the country was very rugged and the climatic conditions were terribly bad. In the course of six months he experienced only 44 fine days, and for several days he was confined to his tent with an injured leg. At this period his wonderful dog turned huntsman and brought in birds daily. In January, 1888, Reischek obtained a passage on the "Stella," which was making its periodical visit to the islands south of New Zealand. From Stewart Island the "Stella" sailed to the Snares, where sea birds were extremely plentiful and the Grey-headed and Shy Albatrosses were breeding in large numbers on the cliffs. At Adams Island he found the Wandering Albatross breeding in thousands, while at Campbell Island he recorded having seen a small flock of Zosterops. On the Antipodes Group he collected two new species of birds. Although devoided of vegetation. Bountry Island, the last place of call, was in possession of millions of breeding sea birds. During the whole trip the weather was extremely bad and Reischek was not able to land on some of the islands, whilst on those he was able to reach his stay was of a brief duration, quite insufficient to enable him to do much collecting.

Reischek's last adventure in New Zealand was the ascent of Mt. Ruapehu, in the North Island. On February 20, 1889, he left Auckland for his native land, and reached Austria on April 13 after an absence of twelve years, although, when he left home in 1877, he expected to return in two years, as this was the term of the engagement. After seeking employment in various parts of the country, he was eventually appointed superintendent of the Museum in Linz, where he remained until the time of his death, which took place on April 3, 1902.

Reischek seemed to have possessed all the qualifications required by a naturalist exploring unknown country. He was active and enthusiastic in his work, and spared neither time nor labour in his efforts to procure rare specimens. His powers of endurance were almost unlimited, as was demonstrated during his long stay at Dusky Sound, where the conditions of the country were sufficient to compel the most ardent of naturalists to give up the pursuits of natural

history. He was typical of the type of German botanists who carried out their work in the rough and unsettled parts of Australia during the last century. These men, though often burdened with heavy packs, penetrated into some of the roughest parts of Victoria in their search for new plants.

The Reischek Collection of natural history specimens was probably the largest and most complete collection ever taken out of New Zealand. He received many offers for it, but through the generosity of some rich men in Austria it was purchased and presented to the Imperial Museum at Vienna, where a special Reischek Exhibition was held in 1926. The magnitude of this unique collection may be gathered from the fact that it contained the following specimens:—37 Maori skulls in perfect condition; 453 ethnographical specimens; 2406 botanical items; 120 skins of mammals; 8000 fishes and reptiles, and 3016 ornithological specimens, including several new species.—D. J. DICKISON, R.A.O.U., Melbourne.

A Banded Plover Mystery.—Riding out fairly early one morning (April 11, 1930), I was attracted by the cries of a Banded Plover (Zonifer tricolor), the manner of whose cry and the note of anxiety in which told of its having eggs or young close handy. At the time I was on a bare, hard flat devoid of vegetation, devoid of everything but loose pebbles—an unlikely situation for a nest.

It being late for eggs, I suspected young. The old bird, crying distractedly, was running, and held on its way to cross my track ahead of me; and twenty yards behind it ran six chicks, with heads up, four inches high, balls of mottled-brown down with small primaries only, but with necks and legs that were long compared to the balls of down.

In their endeavour to keep touch with mother they ran, evidently guided by her voice, for I doubt if they could see her, keeping up the whole time a continuous pleading "cheep, cheep, cheep, cheep," as if fearful of being left. I rode to the back of them and followed. I was anxious to see more of the chicks, so without pushing them I kept with them for a couple of hundred yards, which brought them to a "dog-netted" fence, netted to keep out dingoes. The old bird held to her course until close to the fence, when she rose on the wings just sufficiently to top the obstacle, and, dropping to earth again on the other side, continued her running.

The chicks, reaching the fence, popped through the threeinch-mesh netting and continued the pursuit of their parent. They were now on the edge of a swamp that offered shelter and food—in fact, in every way congenial surroundings. Once there the old bird, now easier in her mind, called a halt while her family got their wind.

But why were there six chicks, all the same age, same size and same appearance? There was never more than the one adult bird with them, and there were no other Banded Plovers in the locality.

Have more than four eggs ever been recorded in a nest of this species? Later in the day I saw another of these Plovers with two chicks, both a good deal older than those seen in the morning, but again only one parent bird. A month earlier (March 7) I found a nest of these birds containing three downy chicks and an egg just hatching.—F. L. BERNEY, R.A.O.U., Qld.

The Plumage Change of the Superb Blue Wren .-- The plumage changes of the male Blue Wren (Malurus cuaneus) are always interesting. At Moree on August 4, 1929. I observed a pair of Blue Wrens, one of which was busily engaged in nest building. This was the only pair of Blue Wrens inhabiting the immediate locality. The male was not easy to distinguish; however, he seemed a trifle larger, his greyish-brown breast was slightly mottled at the side with black, his tail showed a dull blue sheen on the under surface and-he did no work. When his little brown wife flew back to the nest with a piece of grass in her bill, the male accompanied her and perched on a nearby twig, whence he sought to encourage her in her arduous labours by making sweet music. When she left, he left too, but did not always follow her in her search for fresh material. However, he always returned with her to the nest. I was unable to visit the spot for over a week, when I found that disaster had overtaken them. Heavy rains had waterlogged the partly-built nest and it had been abandoned. But the Wrens were still there, though the female had not commenced to build again. On that day, August 15, the plumage of the male is thus described in my notes:-"Crown brown, but central feathers on the nape show light Black line through eye, down side of neck, then forward to meet throat patch of mottled black and brown. No bright blue anywhere. Forehead pale blue. Side of throat and cheek pale glossy blue in front and then a grevish brown patch abutting on the black line down from the eye. Back brown, but when feathers ruffled, black shows beneath. Tail shows light blue beneath, dorsal surface, much greyish brown."

Two days later the male was much better dressed. "Bright blue cheek patch. Breast still mottled, but with a brighter black. The inner wing shows black anteriorly.

Crown grey with a little blue at the sides. Blue showing on upper back, just behind black patch at side of head. Middle back brown. Some dull black showing on lower back."

On August 20 the male was in full plumage, except that the tail showed very little blue and that on the crown was a brown central spot surrounded by blue. (This is interesting in view of the peculiar crown of the Lilac-crowned Wren (Rosina coronata), which is a near relative of the genus Malurus. Was the common ancestor of Rosina and Malurus characterised by a similar central spot on the crown? Bearing in mind the belief that an animal in its growth "climbs its own genealogical tree," may we infer that Malurus is a more recent evolution than Rosina?

I have read that the adult male Blue Wren moults in the late summer or early autumn. Was this Wren an immature bird acquiring his adult plumage for the first time? If so, he was nevertheless sufficiently matured to take a wee brown wife unto himself before he had donned the wedding garment.—C. S. SULLIVAN, R.A.O.U., Moree, N.S.W.

The Auk's Veteran Editor.—Members of the R.A.O.U.. who have long appreciated the high quality of The Auk (journal of the American Ornithologists' Union), under the editorship of Dr. Witmer Stone, have learned with pleasure of the success of the last annual meeting of the A.O.U. at Philadelphia, when Dr. Stone was chairman of the local committee. In sending to me particulars of the meeting. Dr. Stone observes that he finds himself rapidly becoming one of "the Old Guard," for at the annual gatherings now there are few who exceed him in length of membership. He adds that he was grieved to learn of the deaths of Mr. A. J. Campbell and Dr. J. A. Leach, and points out that 1929 was also a sad year for the A.O.U., marking as it did the passing of Dwight, Ridgway, Forbush, Lucas, Miller and Nehrling, all distinguished ornithologists.

"Australian birds," Dr. Stone further says, "have always seemed very real to me since I have been familiar with the Gould Collection here in our museum for 42 years. They were originally all mounted, and I personally catalogued them and dismounted those which we regarded as the types, which are now in our air-tight, light-proof type-cases. While I never hope to get to Australia, the study of this collection has made me familiar with the Gouldian localities and with the birds as they stood on the stands. Now your last book, Birds and Green Places, together with The Emu, has given me the birds in life."—A. H. CHISHOLM, C.F.A.O.U., Sydney.

Gulls.—Whilst on a trip to Sandy Cape during the early part of January, 1930, accompanied by my wife, I was writing up some notes seated on the old jetty at Temma. My attention was drawn to a wandering pig belonging to the owner of the hotel there, Mr. J. H. Cartledge.

The pig was approaching me along the beach close to the hotel, nosing and grubbing about amongst the strands of kelp and sea-weed lying on the sand. In close attendance on the pig was a fine mature Silver Gull (Larus novæhollandiæ) which was intent upon taking the sand-hoppers and other beach insects which the pig was disturbing in its methodical investigations. The Gull would approach within five feet of the pig, uttering a short cry at frequent intervals. When the pig had come within twenty yards of me, the Gull would not approach any further, but quietly took wing away to the end of the beach again.

I noticed on several occasions whilst along this wild coast that the Pacific Gulls (Gabianus pacificus) met with in flight anywhere along the rocky shores, and suddenly espying us, would always turn in their flight and return to soar over our heads, uttering their loud and raucous cry, as much as to ask what we were doing there.—ROBT. W. LEGGE, R.A.O.U., Tasmania.

Dancing Lyrebird.—On April 10, 1930, a dull cloudy day after rain, at about 11 a.m., I was wandering through a dense part of the Sherbrooke Forest, Vic., when I heard a boisterous noise. Suspecting Lyrebirds I crept up very stealthily, and came to within six feet of a male bird. being hidden from it by bush. It was probably unaware of my approach. I stood up straight on a log and had an excellent view of proceedings. The bird, with tail fully spread, was making a fine noise. The tail was spread in a horizontal position in the form of a canopy so that the body of the bird was hidden from view. This at first rather bewildered me, as in this position the tail has not the conventional lyre shape—more the appearance of a fully spread fan. Soon the female bird made its graceful and dignified appearance. The male bird raised its tail to a vertical position (now in form of lyre) and started dancing. is really most amusing. Prancing would be a more appropriate description than dancing. The female bird watched these peculiar antics for a short time, then casually strolled off and started scratching in the undergrowth for food. The male bird stopped dancing, re-spread its tail over itself and commenced again to run through its repertoire of bird calls. This it continued to do for about a quarter of an hour longer, when I left the scene. On leaving I made no attempt to retreat quietly, but fairly crashed away

through the undergrowth. But this caused the birds no apparent anxiety. The female looked up from its scratching for an instant, but then resumed quite unperturbed. The male entirely disregarded my noisy departure and continued its concert uninterruptedly.

I could not help being surprised at the indifference of the birds to my presence. I was within six feet of the male bird all the time. The female during that time, foraging for food, at times came even nearer to me than this. one occasion it hopped on the log upon which I was standing and scratched about in the rotten bark and moss not more than two feet from me. The male bird was calling continuously all the time I was present. Even when dancing it made a peculiar oft-repeated noise, at the same time poking its head forward. I think this may have been an imitation of sawing, but if so not a very good facsimile. I should say it had about eight separate calls in its repetoire, those I recognised being the notes of the Whip-Bird. Kookaburra, Butcher Bird, chickens, and what appeared to be a Parrot note. It followed one call rapidly on another and did not persist long on any particular one, so that the notes followed on in a continuous melody.—ALAN D. MACNEIL. Communicated by J. H. REED, R.A.O.U., Toorak, Vic.

Injured Double-banded Dotterel.—Apparently young birds of migratory species do not always return the first season to the areas in which they were hatched. Often reports are made of Eastern Curlews (Numenius cyanopus) being present throughout the whole year at Western Port, Victoria. Evidently the birds that remain, if young birds, do not breed during the first season. And occasionally odd birds remain with us when their companions depart, for other reasons, such as their having received an injury which unfits them for their long journey northwards.

At the mouth of the Kororoit Creek between Williamstown and Altona, near Melbourne, Asiatic waders of three species—the Little or Red-necked Stint (Erolia ruficollis), the Sharp-tailed Sandpiper (E. acuminata) and the Eastern Curlew—congregate in the summer months, the last-named being usually represented, however, by but a few birds. One winter, well after the time that these migrants should have left us, I noted, on a small pond not more than 100 feet square and which had been formed by banking up the sides, evidently part of a system to drain the adjoining land, a small brownish bird, in the company of, although slightly larger than, the Red-capped Dotterels (Charadrius ruficapillus) which frequented the locality. The bird was hopping about on one foot, the other leg evidently being

broken or otherwise injured. By a process of elimination, as well as by what was thought to be positive identification. the bird was considered to be a Red-necked Stint. "marooned" here when its companions departed northwards to nest. Several times during the next few weeks the hird was observed in the same place. Then about November I was again at the pond. As I peered cautiously over the raised bank I saw my "Stint" hopping about as usual, but when it turned and faced me I noticed the two completely coloured bands, one black and one chestnut, of the Double-banded Dotterel (C. bicinctus). What I thought earlier was a "Stint" was evidently the Double-banded Dotterel in its winter clumage, and when its underparts were plain and unornamented by the double banding. But in any case the bird was evidently unable to undertake the usual migratory flight, even as I originally thought, because although when first observed its kind were rightfully here. yet in late spring birds of this species should be in New Zealand, whence they migrate and where they breed.-C. E. BRYANT, R.A.O.U., Melbourne.

Scrub-wren and Its Nesting Material.—When examining nests of the White-browed Scrub-wrens (Sericornis frontalis) in the ranges I have frequently noticed that they contain great quantities of Lyrebird feathers. I had often wondered how it was that these birds were able to collect such a large number of them. Quite unexpectedly I received an answer to my query a few days ago. I was standing beside the nest of a Lyrebird when a pair of Scrubwrens came to the nest. One remained on top apparently keeping watch whilst the other entered and soon returned with a beak full of soft warm feathers for its own nest. This performance was repeated three times within the next three-quarters of an hour. This seemed to me all the more remarkable, as there was an egg in the Lyrebirds' nest which, to my knowledge, had been there for the past three weeks.—N. J. FAVALORO, R.A.O.U., Melbourne.

## Camera Craft

The Nest of the Grey Fantail.—The architecture of birds is always interesting, but the nest of the Grey Fantail (Rhipidura flabellifera) is one of the marvels of Australian bird-architecture. I was fortunate in discovering a Fantail commencing to build its nest, and determined to secure a photograph of the nest in the course of construction, without disturbing the bird. Using a 20-in. telephoto lens, I was able to obtain a series of interesting photographs. The nest was constructed of fine grasses and stringy bark woven