Empidonax pygmæus, as mentioned above. Icterus bullocki; a Pyranga, probably P. hepatica, but possibly only P. æstiva. Carpodacus frontalis, very rare. Molothrus pecoris, common. Mimus polyglottus, var. caudatus. Centrurus uropygialis, rare from the Gila valley. And here I must stop to mention a singular fact. This same Gila Woodpecker does not live on trees at all, but on the giant-cactuses-the "Saguara" and the "Petahaya" of the natives, Cereus giganteus and C. thurberi of naturalists. It digs holes into the soft stems, and feeds on the fruit and on insects. To return: Polioptila cærulea, as well as the commoner P. plumbea; Chroicocephalus philadelphia; Bernicla brenta, Pelecanus trachyrhynchus (these water-birds from the Gila); Antrostomus nuttalli, and I think also A. vociferus, for I have distinctly heard the three syllables, "whip-poor-will," as well as the two syllables, "poor-will." I am not sure whether I included Pyrocephalus rubineus in my former list; I now have a specimen. I may find other birds before I leave; but my ten months have not been spent idly, and I fear there is little more to be got here. * * * * Yours, &c.,

ELLIOTT COUES.

Takow, Formosa, June 1, 1865.

Sir,—I was obliged to pass over the close of last month for want of time. This letter must contain my report for April and May. On the 6th of April my men rushed in with a fine old cock Euplocamus swinhoii. It was captured in the hills some eighty miles off, and only died the day before it reached me. It was in very good condition, but had lost a few of the maroon scapular feathers. The tail culminates for half its length, and then divides right and left, like that of a common cock, but is not so much arched. It consists of seven graduated black feathers on either side, the largest about 2.5 inches longer than the next in succession, besides one central white feather exceeding the longest black one by 3.5 inches. It is thus divided into two independent halves, overlapping each other for a quarter of its length, which is altogether about 18 inches. The bird is fully adult, its spur being '7 inch long, a little curved and somewhat pointed. The white crest is short, nor

have I ever seen it 2 inches long in the many specimens I have examined. The bill is yellowish, fading to horn-colour; the iris in the male reddish straw-colour, in the female brown. The bare face-skin is of a much deeper and richer red than in Mr. Gould's plate, and is much more developed. The smaller figure in that plate gives the best idea of its appearance. One lobe stands erect, high over the crown, another stretches back above the ear, a third extends well over the nostril, and the lower one forms a full-hanging wattle. I find, however, in live examples that the edge of the face-skin is very expansile, and that the bird has power to control its extension or contraction, somewhat similar, though in a less degree, to that which obtains in the Turkey. The legs are of as rich a carmine as in the Silver-Pheasant; the spur is nearly white, and the soles pale dingy buff. I hope before long to introduce this magnificent species to the general public at home, through the Gardens. One fine male has already gone forward, through Dr. Squire, by way of Calcutta; and I have sent several more of both sexes to Hong Kong for direct shipment. When disturbed in its cage, the bird utters a sound like "hah-sh," and ruffles up its feathers. It has also a chuckling note, chiefly uttered by the females. These are much more weakly than the cocks, and sooner succumb to fate. Among several pairs brought to me from the Tamsuy neighbourhood was one cock of a variety which the Chinese call Aw-kak. This has no white about it. The crest is black, the dorsal feathers are maroon, like the scapulars, and the middle rectrices are black. This specimen unfortunately escaped, and was killed and plucked by "outside Chinese" before I got hold of it again. I procured at Tamsuy a similar example; but it had more or less white on the parts where it is found in the normal form. This led me at the time to imagine that this peculiar plumage was only a stage towards maturity. According to the Chinese, the form without white is common enough. They distinguish it as a separate species, but also insist that there is a third one, which, as far as I can make out (for I have not yet seen it), would appear to be the bird in its first year's plumage. I must investigate the case further before I can speak of it with confidence.

In my last letter I advised you of the discovery of a Formosan Chalcophaps, and described the male [anteà, p. 357]. On the 18th April I procured a fine specimen of the female, which, compared with the male, might be taken for a distinct species. On the breast of this example are one or two white feathers, which may be due either to albinism or immaturity. I think, the former. It was proved to be a female by dissection. The crop was full of hard black seeds, like irregularly shaped peppercorns.

Chalcophaps formosana, Q. Bill and legs not so brightly coloured as in the male. Forehead and an irregular streak over the eye cinereous. Crown, sides of neck, nape, and upper part of the back liver-brown, shot with a lovely purple-pink. Axillaries, edge of anterior primaries, and patch on under-quills cinnamon. Wing-coverts and tertials for the greater part of the length coppery green, or green reflecting fiery hues; some of the dorsal feathers tipped with the same, and, the brown bases being concealed, forming a nearly complete mantle. Lower part of the back blackish brown with two cross-bars (about '75 inch apart) of finely mottled dingy white; the lower band edged with grey. Rump light chestnut-brown, bordered with blackish. Quills brown, those of the tail deeper in colour. The outer tailfeathers cinereous, with a grey-tipped broad black end; the next with the basal two-thirds rich chestnut, and a brownish extremity; the next with the chestnut less bright, and so on till the middle ones are reached, which are brown altogether. The under-parts pale russet, with the throat, cheeks, and belly paler than the rest. Length about 8.75 inches; wing 5.62 inches; tail 3.5 inches, rounded and wedged. First quill about 4 inch shorter than the second, which is equal to the third and 2 inch shorter than the fourth.

The other green Dove, Treron formosæ, was shot a few miles from here by a Chinese sportsman. It was a male; but it reached me plucked! You can imagine how wild I was. I hope, however, to get a male to describe before the warm season is over. At present the species rests on a female which I procured in 1861. From its rarity, it would appear to be a mountain bird. Turtur humilis is now the commonest Dove. T. chinensis, a

On the 18th April I observed a fine long-tailed male of *Tchitrea principalis*. A similar specimen was brought to me a few days after, dead. It precisely corresponded with the bird which, in spring and autumn, touches at Amoy on its migration to and from Japan.

On the 23rd April, a male *Podiceps minor* was brought to me. It had the corners of its mouth yellow, and the entire breast blackish, exactly as in English specimens. There can be no further doubt of our bird being identical with the European. At the same time the sportsman handed me a Leaf-walker. This is new to the Formosan list, though, from its occurring in the Philippines and in China, there was, of course, no doubt that it would also occur here. This example was engaged, with several others, in walking on the water-plants in a large pond not far from here. It is in complete summer-plumage, but its tail is not quite fully grown:—

Hydrophasianus chirurgus, &. Bill and legs lead-colour washed in places with olive-yellow. Tail of twelve feathers, the

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lateral ones very short, the four middle long and subulate, one fitting into the groove of the other. Length 16.5 inches; wing 6.75 inches; tail 8.5 inches. This bird is considerably smaller than my specimens from the Himalayas; but it corresponds with them, feather for feather, with the exception of a black mottling on the under edge of the wing, which does not occur in any of three Himalayan examples I compared it with.

I have received a small box of birds from Consul Caine at Swatow. The most interesting were two males of the Chefoo or North China Red-legged Partridge. I have compared them with specimens of Caccabis chukar from the Himalayas, and find that the two are identical, except that the Chinese bird has a rather longer bill. I think we must therefore dispense with a new species on this occasion. The next in interest was a mutilated specimen of Coturnix caineana. The rest were the following common species: — Otus brachyotus, Nycticorax griseus, Anthus agilis, Ruticilla aurora, Melophus melanicterus, Sturnus cineraceus, Petrocincla manilensis, and Halcyon smyrnensis.

About the same time I received from Taiwan-foo a pair of Bamboo-Partridges (Bambusicola sonorivox). They are lighter in colour all over than Tamsuy specimens, have the wings more spotted with white, and in smaller blotches. The quills are less marked with brown, and show signs of youth, which, after all, may be the true cause of these differences.

From the mountains in this neighbourhood I have got a pair of Oreoperdix crudigularis (Ibis, 1864, p. 426), entirely similar to those from the Tamsuy mountains. The bright orange-red of the legs extended in these birds quite to the tip of the claws. My Tamsuy collector further brought me an egg of this species, dropped by a female which was shot. It is white and smooth, with a dingy cloudiness appearing as it were through the shell. In form it is strictly ovate, and measures 1.6 in. in length by 1.1 in. in breadth.

On the 14th May, on the hill-side, I flushed a Button-Quail, which by its peculiar manner showed that I had disturbed it either from its eggs or young. I looked about, and soon came across a young one, and shortly after three more concealed under some dead leaves. I hurried home, and, supplying my-

self with my gun, a cage, and some string, returned to the spot. I tied the young ones inside the cage, and, fastening a long string to the door, left a China-boy at the other end to watch for the When I came back from my wanderings, I found the old one had been seen, but would not enter the cage. The young were uttering their cry, to which an angry purring sound replied from the neighbouring bushes, and out trotted the old bird, clucking like a hen, but in a lower note. It beat the sides of the basket-cage, but would not enter, and ran backwards and forwards to the bushes, calling for the chicks to follow. When my man tried to catch it in his hat, it shuffled away, seldom attempting to fly. It was then getting dark, and, rather than lose the bird, I shot it. It was the only parent in attendance on the chicks, but, curiously enough, on dissection it proved to be a male. Perhaps the female had been previously destroyed, or, what is more likely, she was hatching another brood; for the chicks had lost their down, and feathers like those of the adult were sprouting in all directions.

This is the bird I formerly referred (Ibis, 1863, p. 398) to Turnix ocellata (Scop.), but I had not then met with the adult. The bird from Amoy belongs to the same group as T. maculosa, and has been determined by Mr. Blyth as identical with his T. blanfordi from Moulmein. From Canton, in Capt. Blakiston's collection, I saw a Turnix belonging to the same group as T. ocellata; but, being an imperfect specimen, I could not with any certainty refer it to any of the numerous conspecies of that particular form. At Tamsuy I got a pair of adult birds, which I did not sufficiently examine, but I cannot help thinking that they were distinct from the Apes'-Hill bird. This, however, to my astonishment, I find to be allied to T. maculosa, but quite distinct from the Amoy form. It is at once to be distinguished by its strong bill; and the specimen being a male, and in adult plumage, I do not hesitate to recognize it as new:—

TURNIX ROSTRATA, sp. nov.

Bill approaching in form that of the genus *Mirafra*. General style of plumage similar to that of *T. maculosa* from Amoy. Upper parts brown, finely mottled with black; some of the

striations coalescing into broad black bars, with a few pale buff spots sparsely scattered. Crown with black spots and an illdefined median line of pale buff spots. Scapulars the same as the back, with the side feathers tinged with red. Wing-coverts light yellowish-buff, clouded with pale brown; most of the feathers barred with long deep brown or black spots. hair-brown, paler at the margin and towards the tip. carpal quill of wing-coverts broadly edged with creamy-white. Edge of wing and outer quill of wing the same, the second less Tail soft, and hard to distinguish. Under wing-coverts pale brown. Throat, eyebrow, belly, and thighs nearly white, some of the feathers of the two first tipped with black. Cheeks nearly white, mottled with black. Breast, flanks, and vent deep rich buff; the lateral feathers of the two first paler and yellower, with deep brownish-black bars and spots. The mottling of the plumage in many places too intricate to describe. Iris pale yellow, nearly white. Eyelid black. Inside of mouth yellowish white, washed with inky. Bill yellowish-white, with a tinge of indigo, blackish on the nostrils, culmen, and tip. Legs, toes, and claws yellowish-white, washed with indigo. Length 6 inches; wing 3.5 inches; bill, from forehead, 58 in., from gape 75 in., height 25 in.; tarsus 1 inch. Wing rounded, the first five quills equal and longest.

The gizzard of this specimen was very muscular, and contained chiefly shells of a species of *Cyclotus*, peculiar, so far as I know, to this neighbourhood. The tibial tendons not at all rigid, as in most *Gallinæ*. Testes of moderate size, but soft and watery. I have reason to think there is a second species of *Turnix* inhabiting the plains, which may prove more similar to the Tamsuy species.

Returning from this walk, I was attracted, by the loud chirping of a pair of Drymæca extensicauda, to a Euphorbia-bush (vulgarly called "Takow Grass," and the commonest growth on Apes' Hill), when out flew the fledged young. I knocked one down. Its bill was yellow, bright at the gape and inside the mouth, brownish on the culmen. Feathers round the eye and eyelid bright yellow. Iris deep hazel-brown. Legs, toes, and claws light flesh-colour.

On the 15th May I was watching some Flycatchers—Myiagra azurea. They open their tails like fans, and flit about from branch to branch. They are very noisy birds, and have a variety of notes, which they utter in quick succession, some of them very loudly. The Chinese name for them signifies "Mango-bird."

May 18th, I received from the neighbouring mountains a pair of *Megalæma nuchalis*, just like the Tamsuy mountaineer. A few days ago, while at Taiwan-foo, I saw a living *Poliornis* in the possession of a European there. It must have been *P. poliogenys*, as it was taken in Formosa; but it was uncommonly like a specimen of *P. teesa* that I have from the Himalayas.

For some two or three days past I had heard on the hills the note of a Cuckoo, which was like the two notes of Cuculus canorus run into one. On the 21st of May I procured a female. It is rather small, but I have otherwise little doubt that it is the bird referred to by me on a former occasion (P. Z. S., 1863, pp. 264, 265) as a second form of C. canorus, which I think must now be raised to the rank of a species. This specimen is more broadly barred on the breast and sparsely on the axillaries than is the Common Cuckoo. Though a smaller bird, it has a comparatively larger bill. Its neck is barred all round; and hepatic patches occur on the wings. In proportions it approaches C. himalayanus of Jerdon (B. Ind. i. p. 323); but the wing of that species is 7 inches long, and its note described as quite different. In fact, Dr. Jerdon speaks of no Cuckoo having such a note as my bird. Two males were crying near the place where this female was shot. As I desire to confer on it a distinct title because of its different note, I cannot do better than call it

Cuculus monosyllabicus, sp. nov.

To the particulars given above I may add that the iris is reddish brown, skin round the eye bright yellow, edge of eyelid black. Bill black, dingy yellowish-olive at the base. Gape and inside the mouth orange; legs fine orange-yellow, with brownish claws. Length nearly 12 inches; wing 7.75 inches; bill, from forehead, .83 inch, from gape 1.08 inch. Tail 5.6 inches.

A female bird. The contents of the stomach were remains of beetles.

The same day I shot a female Malacocercus taivanus. Its bill was dull ochreous yellow, browner on the culmen. Legs lighter and dingier; claws paler still. Stomach contained remains of grasshoppers.

I must conclude with a few words on an expedition I made, on the 28th May, to Apes' Hill Bluff after Eagles. This bluff, which is about 1100 feet above the sea, is a small plateau, cut up again and again by deep chasms and small shallow valleys, overgrown with grass and scrub, and difficult to traverse. sea-face is visited by Eagles; and I fancy a pair or two nestle on its inaccessible cliffs. I failed on a former occasion to scale the front; I now attempted to take the fortress in rear. On my way I was amused by the Monkeys (Macacus cyclopis), who seem to possess almost human savey; and in one ravine I flushed a pair of Bamboo-Partridges; but to the face of the bluff I could not attain. It began to grow late, and, despairing of having my eyes cheered by the sight of the Eagles and Falcons I should probably have found had I reached the cliffs, I turned my steps backward. A Kite or two would occasionally hover over me, enticing a shot; but I was bent uponhigh er game. Suddenly, on a peak before me, I descried a tall dark bird, sitting erect. I walked carelessly on, and getting within distance let drive a cartridge at him. Over he toppled. I scrambled down the ravine at the imminent risk of my neck, forced through the bushes, and, throwing myself forward, seized by the wings what I felt confident was an eagle. Judge my mortification when, turning the gasping bird to the light, I found I held a Kite! Yea, verily, an ignoble Milvus govinda, in its dark first year's dress,—the transparency of the air and my excited imagination having magnified it into the dimensions of an Eagle. I am, &c.,

ROBERT SWINHOE.

Bremen, Aug. 3, 1865.

SIR,—Perhaps you would like to publish in the next Number of the 'Ibis' a synonymical notice of some interest. The bird