and outer toes are of the same length (in *Eurystomus* the inner toe is considerably shorter); also the claw of the short hinder toe seems considerably longer than in *Eurystomus*. The nostrils, which in *Eurystomus* are covered, are bare in *Pseudochelidon*; and the very peculiar compression of the short broad beak towards the tip is not found in the former genus.

The only example of this small, but, in spite of its appearance, very interesting bird is among the treasures of the Bremen collection.

XXXVI.—*Notes on Ornithology taken between Takoo and Peking, in the neighbourhood of the Peiho River, Province of Chelee, North China, from August to December, 1860.* By ROBERT SWINHOE, Corr. Memb. Zool. Soc. Lond., Member of I. R. Zool. & Botan. Soc. of Vienna, C. M. of the R. As. Soc. of Bengal, &c.

FROM Takoo to Tangkoo, a distance of some five miles, nothing but open flats of mud present themselves to the eye, relieved by ditches some 10 or 20 feet wide, which communicate with the sea, supplying the salt-pans with sea-water, and were used during the war as impediments to the passage to and from the forts. Pools of water also frequently abound, sprinkled here and there with rushes. About Tangkoo, on both sides of the river, the ground grows more firm and becomes covered with coarse grass and low vegetation, though abounding in marshes. Numerous gravehills speckle the face of the flat plain, and, magnified by the mirage, assume the aspect, at a distance, of small villages or houses grouped together. These localities afford ample shelter to the small Chinese Hare (*Lepus sinensis*), and are frequented by numerous species of birds. On leaving Tangkoo on the passage up the river, both banks are lined with flourishing gardens and orchards, abounding in great plenty in all the fruits and vegetables of the north, though further inland the country still retains its marshy appearance, undrained and uncultivated; and it is not until you reach Hunshuy-koo, some twenty-five miles up on the south bank, that cultivation springs into existence, and large fields of coarse millet (*Sorghum*) and maize wave their lofty stalks over your head and destroy your view. Villages

begin to increase in number, though without many trees. Cultivation increases as you advance to the walls of Tientsin, where a large open grassy plain to the east arrests your attention. I was the only interpreter with Sir Robert Napier, General of the 2nd Division, on the march to Tientsin; and as the divisional duties were so heavy, I had not much time to shoot, or to bestow on natural history. But fortunately, on the march to Peking, I was attached to the topographic department under Colonel Wolsely, and my duties being principally confined to making inquiries of, and getting information from, the natives, I had plenty of opportunities, in our numerous halts, of paying some little attention to my favourite study. The Grand Canal, the Ta-se and Seaou-se Rivers, with the main branch of the Peiho winding N.W., together with their numerous creeks and tributaries, all offer excellent feeding-ground to numberless water-birds. The country consists of one vast alluvial plain of mixed sand and mud, gradually and almost imperceptibly ascending towards Peking. In the neighbourhood of Ho-se-woo, on the banks of the Peiho, a few sandy undulations break somewhat the flatness of the country. After leaving Tientsin the numbers of trees about the villages begin to increase, and as you approach Peking, tops of lofty timber overshadowing the *tumuli* of departed greatness give in many places quite a sylvan aspect to the scene. As we marched up in September the chief crops of sorghum, maize, cotton, three descriptions of small millet, pumpkins, beans, &c. were all ready for the harvest, and in some spots the reapers had already been busy. On our return in November the country presented a very barren face. All that was left of the waving maize and millet was merely the dry and hardened pegs, some foot and a half high, which covered acres of ground, and made digression from the road very unpleasant for the horses' legs. We were delayed some time on the banks of the Yunleang Canal, some seven miles from Peking, waiting for reinforcements. This canal is the chief water-communication between Tungchow, on the banks of a branch of the Peiho, and Peking. It runs close to the Peiho, but not into it; thence westerly under the Pa-le (8 le) or stone bridge to the first weir, where the further portion of the canal is dammed and lies some 10 feet above. There

is a small custom- or toll-house here for the purpose of levying duties on goods reshipped from the lower on to the upper portion of the canal. The canal was reported to run through and round Peking; but it was found to do nothing of the kind, it being again dammed on its approach to that city. The banks of this almost stagnant piece of water are densely clothed here and there with rushes and high grass, which afford skulking-places to many a freshwater-frequenting bird.

On the north of Peking there is a large open space of ground beyond the Russian cemetery, called the parade ground, where the Chinese troops were said to exercise. Beyond this, again, stood several Lama temples abounding in lofty trees, the haunts of many of the Crow-tribe: and the Imperial grounds inside of Peking, with their gardens densely planted with trees, were further favourite resorts. We cannot allude to the parks of the Summer Palace, with their lakes and fine groves of timber, without making the soul of the naturalist long for a year's ramble at least in these lovely bird-frequented spots. But the follower of an army suffers under great disadvantages. He is at all times interdicted from shooting within the precincts of the camp, and as soldiers always choose sylvan spots for their encampment, if the camp be a large one, he finds every grove monopolized by the army, and unless he travels miles away in a dangerous country, has little prospect of procuring much. With such a treacherous race as the Chinese one never knew when it was peace, and so the constant sounds of guns miles from the camp were not at all unlikely to alarm the outposts. M. Zill, an amateur naturalist in the French camp, found the same difficulties there, and being dressed in private costume he was held in greater restraint by the French soldiery than one in uniform would have been. On our return march the cold presented many obstacles. I merely make the above remarks in case any one looking over the following list might object to my want of activity, forgetting the difficulties I had to contend with. I procured the skins of some fine Deer in the Summer Palace Park, which, together with a few other mammals and a few reptiles, have been forwarded to the Zoological Society of London for determination. The plants I collected I have presented to Dr. H. T. Hance, H.M. Vice-Consul at Whampoa, well

known for his diligent researches in Chinese botany; and the insects to J. C. Bowring, Esq., the best entomologist, perhaps, this side of the Cape.

On our return to Tientsin we found the market well-stocked with wild fowl and other game at cheap rates; but it was difficult to make the natives understand that I wanted the birds for their skins merely, and preferred clean and perfect specimens to those partly plucked in order to show their plumpness.

I am sending the skins procured from the above-mentioned localities as well as those from Taliénwan for the inspection of the Editor of 'The Ibis,' that he may correct or add to my remarks in any way he chooses*.

1. BRAHMINY KITE. *Milvus forinda*, Sykes.

A somewhat larger and stronger species than the southern bird, and much larger than the Indian form.

2. JAPANESE BUZZARD. *Buteo japonicus*, Schlegel.

3. EAGLE BUZZARD. *Buteo* — ?

The female of this bird was procured at Tientsin in November. It was hooded and carried about on the fist of a Chinaman, who said he was training it for hunting hares. I saw another, a good deal resembling it, with a blue back, which I took for the male. A Chinese had it on his arm; but as we were on the march from Tientsin to Takoo, I was not able to purchase it. I never noticed it in a wild state. Cere yellow, legs pale yellow tinged with blue, claws black.

4. HEN HARRIER. *Circus cyaneus* (Linn.).

Common about the marshes near Takoo in August.

5. PIED HARRIER. *Circus* — ?

This is the species numbered 12 in my notes in 'Ibis' for 1860, p. 359. I have not yet succeeded in identifying the species, but I think it may be *Circus hudsonius* of America. I noticed it occasionally about the Takoo marshes at the same period as the foregoing.

* These skins have not yet reached us; but we are unwilling to detain Mr. Swinhoe's paper any longer, and will therefore give any observations we may have to make on them in a subsequent Number. — Ed.

6. KESTREL. *Falco tinnunculus*, L.

Not common.

7. MERLIN. *Falco æsalon*, L.

I was watching a small Hawk being chased by a Magpie. The Hawk was in great distress and screamed piteously as it flew round and round the woody graveyard in which I was standing, to try and elude its persecutor. Presently I heard the report of a gun outside, and running out found Colonel Dupont and M. Zill with the body of a female of this species expiring in their hands.

8. RED-LEGGED FALCON. *Falco vespertinus*, L.

Occasionally seen. M. Zill assured me he had seen and shot it at Chefoo, the northernmost promontory of Shantung, where the French rendezvoused.

9. SPARROW-HAWK. *Accipiter nisus*?

I suppose this is the same as the South-Chinese species; but the female I procured has rust-tinted axillæ as in the European bird, whereas those parts in the Amoy bird are white. I must say I took an unfair advantage of the individual of which I send the skin. It was very nearly dark one evening when I was standing in a pine plantation looking out for Blue Pies. I felt, rather than saw, something dark by me. It charged into a tree, and settled on a bough. I put up my gun and fired at guess, and to my delight picked up a bonny Sparrow-Hawk. This took place in November on our return march, the thermometer standing below freezing-point.

9a. EAGLE-OWL. *Bubo maximus*.

10. TAWNY OWL. *Otus brachyotus*, L.?

When the army was advancing on the north wall of Peking, an owl was put up from its skulking-place in a field of dried maize-stalk. It flew round and round and again settled. It appeared to me to belong to this species.

11. GOAT-SUCKER. *Caprimulgus jotaka*, Schlegel.

A male was caught alive in August soon after our landing at Pehatang. This species I take to be the true *C. jotaka* of the 'Fauna Japonica.' It seems to differ somewhat from our Amoy species.

We did not see any more of them ; they had probably migrated, or this might have been a single individual blown ashore from its usual course of migration. We certainly did not observe the bird at Talienwan.

12. FILLETED SWIFT. *Cypselus vittatus*, Jardine.

Not uncommon on our first arrival.

13. SWALLOW. *Hirundo rustica*, L.

A common summer resident.

14. TIGER-SWALLOW. *Hirundo daurica*, Pallas.

Flocks frequently seen in August and September.

15. SAND-MARTIN. *Cotyle riparia*?

I send two specimens of this pretty little Swallow. It was very common about the marshes at Takoo, often perching on the ground, apparently to take rest and preen itself. In the plain before Tientsin thousands of this species, in company with large parties of the two foregoing, swarmed the air during the warm days of September, engaged in catching the numerous flies that haunted the camp. We were delighted to see these active little fly-destroyers engaged so busily in the work of destruction, as we were literally inflicted with a plague of flies ; every tent was blackened towards the top with these small pests.

In the flights of Swallows met up the river near Amoy, I observed a smaller and lighter species, which I conjectured at the time might be Sand Swallows ; but as I was unable to procure specimens, I let the matter pass. I cannot help thinking now that they were of this species.

16. KINGFISHER. *Alcedo bengalensis*, Latham.

Sometimes seen, but not common.

17. HOOPOE. *Upupa epops*, L.

18. WARBLER. *Luscinia canturians*, mihi.

This, or the closely allied species *L. cantans* of Schlegel, occurred in August, but I did not procure specimens.

19. GRASSHOPPER-LARK. *Locustella* — ?

Closely allied to *L. rubescens*, Blyth, but differs in many respects from a specimen of that bird kindly sent me by Mr.

Blyth. I observed this bird in August, but was not able to procure specimens. I therefore enclose my only specimen from Amoy, that Mr. Sclater may inspect it, and, if he considers it new, describe it.

20. FANTAIL WARBLER. *Cisticola cursitans*.

Not common. Probably resident; one shot in October on the banks of the Yun-leang Canal.

21. SPOTWING REDSTART. *Ruticilla aurorea*, Pallas.

A few observed. Leaves early.

22. BLUE-THROATED WARBLER. *Cyanecula suecica* (Linn.).

One caged specimen observed at Tientsin.

23. RED-THROATED WARBLER. *Calliope camtschatkensis* (Gm.).

This is a common bird in the neighbourhood of Peking, and, I think, is a permanent resident. I observed it as late as October skulking about amongst the long grass, like a Reed-Warbler, whence it was very difficult to drive it. Perched on a tree, it assumes many of the habits of the Redbreast, throwing the tail up and bobbing forward. It is a great favourite among the Chinese, who call it the Hung-po (Red-throat), and sometimes Chin-po (Golden-throat). The female has the red decoration on the throat like the male, but this is not the case in the young birds. I send three males and one female; two of the males were taken from a Tartar camp. They were attached, by strings tied round the neck, to a long twig, on which they amused themselves by hopping up and down. This is a common way of confining birds in the north.

24. BLUE-TAIL. *Ianthia rufilata*, Hodgson.

A summer resident only.

25. REED-BIRD. *Acrocephalus magnirostris*, mihi.

I saw this bird frequently in August about the reeds on the banks of the Peiho. It migrated soon afterwards.

26. STONE-CHAT. *Pratincola indica*, Blyth.

The separation of this bird from the European *P. rubicola* is usually very arbitrary. It appears, in my opinion, to be only a variety. I saw a few in September near Ho-see-woo, and secured a female, which I send.

27. RIBBON-TAILED FLYCATCHER. *Tchitrea principalis* (Temminck).

I observed one in the garden round Sankolinsin's head-quarters at Takoo in the month of August. It was a female, and from its superior size I should take it to be the Japanese species rather than the Southern-Chinese bird, if these are different.

28. BROAD-BILLED FLYCATCHER. *Hemichelidon latirostris* (Raffles).

Common in August.

29. GREY-SPOTTED FLYCATCHER. *Hemichelidon griseisticta*, n. sp. Wrongly referred to *H. fuliginosa*, 'Ibis,' 1860, p. 57.

This bird, which has occasionally been procured at Amoy, I met with in August in a garden near Takoo. I send the Editor an Amoy specimen for comparison. The species is closely allied to the last, but is larger, and is marked with oblong grey spots on the breast and flanks. Mr. Blyth has pronounced it new.

30. PIED-TAIL FLYCATCHER. *Erythrosterina mugimaki* (Temm. & Schl.).

Very common in August and September about orchards. Throws up and expands the tail, uttering a Robin-like running note.

31. DALMATIAN GOLD-CREST. *Reguloides proregulus* (Pallas).

Very common among the trees near Tungchow in September.

32. YELLOW-RUMPED GOLD-CREST. *Reguloides chloronotus*, Hodgson.

Common in the same spot and at the same date as the foregoing.

33. BROWN WREN. *Phylloscopus fuscatus*, Hodgson.

Common in September. Col. Dupont shot specimens of this and the two last while à la chasse with M. Zill and myself.

34. CROWNED WREN. *Phylloscopus coronatus* (Temm. & Schl.)?

I frequently saw a species of Yellow Wren in the low scrub near Tangkoo in August, which I took to be this species. As, however, I did not procure specimens, I mark the name with a query,

35. LEADEN-LEGGED WREN. *Phylloscopus plumbeitarsus*, n. sp.

I shot but one of this pretty species, and took it at first for

P. sylvicultrix, mihi, so common at certain seasons at Amoy; but on handling it, I at once observed the 1st primary, quite small in *P. sylvicultrix*, to be much larger in this species. The *tarsus* was furthermore, strange to say, of a leaden colour, as in the *Paridæ*, though the feet were quite *phylloscopine*. I extract my notes taken while the bird was fresh.

♂. Length $4\frac{2}{10}$ in.; wing $2\frac{3}{10}$, 1st primary $6\frac{4}{10}$; tail $1\frac{8}{10}$; tarsus $\frac{6}{10}$. Bill: upper mandible brown, lower mandible and rictus clear ochre. Legs leaden grey, bases of toes and claws pale yellowish. This species resembles much *P. sylvicultrix*, but is distinguishable at once by its large 1st primary, the grey legs, and the ochreous under-mandible. In this last peculiarity it resembles *P. coronatus*; but is a smaller species, and is totally destitute of the pale yellowish stripe, flanked by a brown one on each side, that crowns the head of the Japanese bird.

36. RED-FLANKED WHITE-EYE. *Zosterops japonicus*, Temm. & Schl.

I saw this bird only once, and that in a cage at Tientsin, and was surprised to find how completely it differed from the Southern-Chinese species, to which I had before ascribed the same name. Schlegel was quite right in the 'Fauna Japonica' in stating that this species has no 1st primary, and that the feathers of the flanks are of a ruddy rust-colour, though in the colour of the legs and beak he was misinformed. These, as in the southern species, are leaden-coloured. The coloured plate, which his son at Amoy has, misled me; as the colours, somewhat carelessly put on, do not show in half-brilliant-enough tints the red patch on each side that marks the species. It will not do to call the other bird *Z. sinensis*, as it is only a Southern-Chinese form, being generally resident in the places where it is found. Let it stand, then, as *Z. simplex*.

37. MARSH TIT. *Parus palustris*, L.

It is surely remarkable that this European species should be the only common bird of the genus in the Peiho Plain. I have four skins, and I can discover no specific distinction; perhaps Mr. Selater may be more successful. Wherever trees abounded, the chirp of this species was sure to be heard. They were rather

knowing, and would seldom allow you to come under the tree in which they were sporting.

38. LESSER OX-EYE. *Parus minor*, Temm. & Schl.

I never met with this species wild here, and only once saw one in a cage. M. Zill assured me it was by no means rare at Chefoo. Perhaps the bird is migratory in these parts, and had departed southwards before our arrival. I do not think there is sufficient difference between this and *Parus cinereus* to sanction a specific separation. I have shot very grey-backed birds at Amoy; and in Hongkong the specimens procured are certainly identical with a skin of *P. cinereus* lately received from Mr. Blyth.

39. PALE REDWING. *Turdus pallidus*, Gmelin.

A few of these birds were about in September.

40. RED-TAILED FIELDFARE. *Turdus* — ?

This Thrush resembles somewhat *T. naumanni*; but a difference is at once seen in the brownish-red side-feathers of the tail, which are conspicuously displayed when the bird flies. A few arrived about Peking in October, and frequented the leafless groves, where they would perch on the topmost boughs of the twigs three or four at a time. The note was a kind of chuckling chirp, and differed much from the ordinary sibilant "sit" uttered by all the other species found in China. The affinities of this Thrush are certainly with the Fieldfare.

I may here state I have *T. naumanni* from Amoy, shot here on several occasions, and identified by Mr. Blyth. A Thrush-like *Geocinclia* has also been procured at Amoy on two occasions. This Mr. Blyth declares to be his *Turdus dissimilis*, once procured in Calcutta. But one of this last species, shot at Hongkong, and included among my birds from Hongkong, Macao, and Canton, forwarded to Mr. Sclater in June last, has been identified by him as the young of *Turdus cardis*. (See *antea*, p. 37.)

41. MONTICOLA — ?

The specimen I enclose was the only one I ever saw of this interesting bird. I met with it on the 26th of September in a grove of pines. It was very lively, hopping about from branch to branch with its eye fixed upon me. It occasionally bobbed its

body and moved its tail with a depressed jerk, much in the manner of *Petrocossyphus manillensis*. I think this is a new species, and, it strikes me, a very interesting one, as being somewhat abundant.

42. GOLDEN THRUSH. *Oreocincla whitei* (Eyton).

The feathers of this species were picked up in a tomb-grove in September; the body had probably been devoured by a Hawk.

43. PIED WAGTAIL. *Motacilla lugubris*, Pallas.

Frequent in September.

44. GREY WAGTAIL. *Motacilla boarula*, L.

In September.

45. YELLOW QUAKETAIL. *Budytes flava* (L.).

Also in September.

46. WOOD WAGTAIL. *Nemoricola indica*?

I watched this or a cognate species for some time closely in an orchard in August. It looked very similar to the Indian skins, but unfortunately I was not able to get a specimen.

47. RICHARD'S PIPIT. <i>Anthus richardi</i> , Steph.	} Common in September; not seen after.
48. TREE PIPIT. <i>Anthus agilis</i> , Sykes.	

49. JAPANESE PIPIT. *Anthus japonicus*, Temm. & Schl.

I think resident.

50. SHORT-TOED LARK. *Alauda brachydactyla*, L.

Observed this bird in a cage.

51. JAPANESE LARK. *Alauda japonica*, Temm. & Schl.

I think identical with the bird in the 'Fauna Japonica.' I send home two specimens. It was very common in the cultivated fields, roosting at night in the coarse grass and water plants that line the banks of the Peiho. Numbers of them were offered for sale in the Tientsin market all ready plucked and trussed.

51a. MONGOLIAN LARK. *Melanocorypha mongolica* (Pall.).

I never saw this bird wild; but, judging from the numbers brought to Tientsin for sale in November and December, I should say it must be common in the neighbourhood.

52. SMALL BUNTING. *Emberiza pusilla*, Pallas.

Found in small flocks on the banks of canals and edges of water-pools. M. Zill had two specimens of this bird alive in a cage, which were more or less marked with white.

53. PAINTED BUNTING. *Emberiza fucata*, Pallas.54. GOLDEN BUNTING. *Emberiza aureola*, Pallas.

Common about the reedy herbage of the Yun-leang Canal.

55. SULPHURED BUNTING. *Emberiza sulphurata*, Temm. & Schl.

Mr. Blyth assigns this to P. Bonaparte's genus *Citrinella*, but it is evidently the bird of the 'Fauna Japonica.' I send an Amoy specimen. I have also seen it at Hongkong.

56. MASKED BUNTING. *Emberiza personata*, Pallas.

Seen in August, but not afterwards.

57. FROSTED BUNTING. *Emberiza canescens*, mihi.

I send an Amoy specimen of the male.

58. RED AND YELLOW BUNTING. *Emberiza rutila*, Pallas.

A fine specimen used to come down into my courtyard to feed at Peking. I loaded my gun with the smallest possible quantity of powder, and shot in order not to make a noise, and so missed him. This was the only one I saw of this handsome species.

59. RUDDY HAMMER. *Emberiza* — ?

The only specimen I saw and procured of this interesting Bunting, I enclose. It appears to me closely allied to *E. citrinella*, L., and will very likely have been described by Pallas in his 'Zoogr. Rosso-Asiat.,' a copy of which work I have not at hand.

60. LAPLAND LARK-BUNTING. *Plectrophanes lapponicus*.

My first acquaintance with this bird was on the 12th of November. It was a bitterly cold morning, the thermometer much below freezing-point, when I started at sunrise to explore the neighbouring country, and to return at eight before the camp broke up. We were within a day's march from Tientsin. My fingers were quite numbed, so that I could scarcely use them to pull the trigger, when I suddenly put up a brown lark-like bird from a tuft of dried cotton-plant. It flew a little way and then dropped again. I then observed that it had a peculiarly short beak, though it walked like a lark. My first shot missed it; yet

the foolish bird only flew a little distance and settled again, looking at me while I reloaded. I then shot it, and imagine my delight when I picked up what appeared to me to be a new species of Lark-Bunting. It was a female. I beat the ground over and over again, refusing several shots at hares that started from almost under my feet, knowing that the birds of this genus are seldom found alone, but could flush no other. I was obliged to give up the chase, and returned to my tent, only just in time to pack up and march. When arrived at Tientsin I found thousands of this bird on sale, plucked and trussed like larks. I begged the market-men to bring some with feathers on, and one morning, to my surprise, found a basketful of very fair specimens. I at once bought two dozen, and set to work skinning them. They measured on an average $6\frac{1}{2}$ in., wing $3\frac{7}{10}$, tail $2\frac{3}{10}$. The natives called them *Teay-cheo* (Iron Bird), and explained to me that they were caught by the hand in springes baited with the small maggots found in decaying millet-stalks. My specimens correspond very nearly with the description of the Lapland Lark-Bunting found in Europe in 'M'Gillivray's British Birds,' though I should think it could hardly be the same species, as its existence is not noted, to my knowledge, in Siberia*.

61. RED-POLL. *Cannabina linaria* (Linn.).

Seen in cages.

62. MEALY RED-POLL. *Cannabina canescens* (Gould).

A pair were found in a cage at Pehtang, where the troops landed.

63. SISKIN. *Fringilla spinus*, L.

This species was frequently seen in cages. I have received it before from Foochow, in Fuh-keen Province.

64. CHINESE GREENFINCH. *Fringilla sinica*, L.

Common both wild and in cages.

65. MOUNTAIN SPARROW. *Fringilla montana*, L.

Common. Takes the place of the domestic Sparrow.

66. MOUNTAIN FINCH. *Fringilla montifringilla*, L.

Often offered for sale at Peking. I send a female procured there.

* It is included in v. Schrenck's work on the Birds of Amoorland (vol. i. p. 276).—ED.

67. HAWFINCH. *Coccothraustes vulgaris*, Selby.

In cages.

68. CROSSBILL. *Loxia curvirostra*, L.

In cages.

69. CHINESE MAGPIE. *Pica sericea*, Gould.

Very common: associating in the winter in large flocks.

70. BLUE MAGPIE. *Cyanopica cyanea* (Pall.).

This shy and noisy bird occurred in large flocks among the thick groves of the pine. Imagine yourself in a dark grove of such trees, walled all round. Several large tomb-mounds stand at the other end, side by side. They can contain nought but the dust of the departed; for these trees were planted at the same time; and see to what a height they have attained, their long arms twining fondly together, and throwing a dark gloom on the coarse grass and weeds below. You hear a rustle over your head, then another and another, and a loud nasal chattering commences. You look up quietly, and see leaping from bough to bough a party of long-tailed blue birds, displaying their pretty tints at each leap, and spreading their tails to balance themselves as they alight. This is the month of October, and still they are moulting. Presently one sees you, and gives the warning "*carr*," pronounced nasally and gutturally, as much as to say "an intruder," and with notes sounding something like "*cairn wit-wit twit-twit*" off he flies. All hands follow, each bird as he flies from his perch joining in the chorus "*twit-twit*." Thus in nearly single file they stream off to the next grove. In July 1858 I found these birds very common near Shanghai, where they were rearing their young in similar groves. Their nests were usually placed close to the top of the fir-trees, and were built exteriorly of sticks, and open at the top, much in the manner of the Jays. As far as habits are concerned, the Blue Pies certainly have far more in common with the long-tailed Jays, *Urocissa*, than with Magpies; and some of their actions are not unlike those of the large Chinese *Garrulax*, *G. perspicillatus* (Gm.).

71. ROOK. *Corvus pastinator*, Gould.

Hundreds of this bird frequented the large trees around the

Lama temples north of Peking. In the morning they might be seen strutting about the parade-ground and the neighbouring fields searching for food; in the afternoon they would collect in large numbers, and toy and cuff one another among the lofty branches, cawing vociferously. They soon learnt a natural dread of the fowling-piece.

These birds are not uncommon near Shanghai, whence Mr. Gould probably obtained his specimens.

72. BLACK CROW. *Corvus japonicus*, Schlegel.

In close communion with the former I often saw these birds, but they were always distinguishable by their larger size and peculiar cry of "caw-caw ah-ah." They associated in flocks, though never of any great extent.

73. WHITE-RINGED CROW. *Corvus pectoralis*, Gould.

I occasionally saw this species, but it was by no means so common as the last.

74. PIED JACKDAW. *Corvus (Monedula) dauricus*, Pallas.

Large flocks of these birds were to be found all day long in the fine trees above mentioned, clustering close together on the boughs, and having quiet talks among themselves. As the sun began to set, one would see flocks of thousands coming to Peking from the direction of the hills on the west. Their flight was always high, and their cries incessant. I should say some twenty or thirty of these immense flocks, sometimes mingled with rooks, but more often with individuals of the following species, would pass over of an evening; the majority settling for the night among the woods in the Imperial grounds inside the city, or in the trees of the temples of Heaven and Earth. The rooks would generally leave them and drop into the lama-trees, where they usually roosted. In the morning at day-dawn one would hear their cries again, even before discerning them in the hazy sky, though their flight was then usually much lower.

75. BLACK JACKDAW. *Corvus (Monedula) neglectus*, Schlegel.

This species was also very numerous, though not so numerous as the last, with which it often associated. Indeed, I seldom saw a flock of either without a few of the cognate species among their number. In habits the two are remarkably similar, as well

as in flight and choice of roosting-ground. I much regret I was unable to procure a specimen of this little-known species, but the temple they most frequented was occupied by the troops, and of course all shooting prohibited within the precincts.

76. WHITE-CHEEKED STARLING. *Sturnus cineraceus*, Temm.
Often seen in flocks in September, but not after.

77. SILKY STARLING. *Sturnus sericeus*, Gm.
A few observed in September.

78. RED-CHEEKED STARLING. *Sturnus pyrrhogenys*, Temm.
& Schl.

I once saw a few small Starling-like birds that I attributed to this species: it was, I think, in August.

79. WRYNECK. *Yunx torquilla*, L.

I observed this species in August, and have no doubt it travels southward to hibernate. It arrives at Amoy in September.

80. GREEN WOODPECKER. *Gecinns canus*, Gmelin?

M. Zill assured me this was no other than the European species, but I have my doubts on the matter. I send three males and one female. I first met with this bird about twenty miles beyond Tientsin, where the country abounded in woody plantations. It was often to be found on the ground grubbing about the millet roots, and its earth-stained bill gave tokens of frequent insertion into the soil. If suddenly disturbed, it would utter a screeching laugh, and fly off with a series of long undulations to some distant tree, on which it would fix close to the roots and immediately dodge round to the other side, clambering up all the while with a short jerking motion of the body. It rarely ascended into the upper branches, and seemed content with beating the trunk of the tree only, unless the tree separated above into good thick boughs. If the tree to which it next flew was only a few yards off, the bird's flight consisted of a flutter in a direct line. When arrived it would half turn on its back, as it were, and throw up its claws to grasp firmly the bark. Its usual note was sharp and monosyllabic, and differed much from that of its pied brethren. It proved to be very common, and known to the Chinese of the place as the "Tsaou-ta muh-tsze" or "Tree-injurer." It was very tenacious of life, and hard to kill.

The iris was white, with a slight wash of pink. Bill bluish grey, except the basal edge of upper mandible and basal half of lower, which were greenish yellow; legs greenish grey, claws bluish grey. The birds had not completed their moult during September.

81. LARGE PIED WOODPECKER. *Picus cabanisi*?

This species is wonderfully similar to *P. major*, but does not quite tally with M'Gillivray's description. Mr. Blyth identifies the Pied Woodpecker from Foochow and Canton with *P. cabanisi*, and I strongly suspect this is the same, though I have not specimens at hand just now to compare with it. I sent Mr. Selater a Canton specimen in my last box, and I now enclose the male, procured in the north, so that he will be able to compare and make his comments.

The first and only time I met this species was near Peking on a cold and sunny day in November. The bird uttered the usual "*pic-pic*" of the pied group as it flew away to an adjoining tree, on an upper branch of which it stood and eyed me without showing any signs of fear. I then saw at a glance that it was a larger species than any I had yet met in these parts, and when I shot it I was delighted to pick up what I took to be an old acquaintance.

82. PIED WOODPECKER. *Picus* —?

I suspect this is a new species. It was quite common in all the groves, but very shy and unapproachable. I only managed to secure one male. M. Zill procured a female, which was similar in all respects to the male, except that the red feathers on the crown were exchanged for black ones, and the top of the beak was black freckled with yellowish grey. This bird generally prefers the higher branches of the trees, round which it dodges, and so eludes observation. If the intruder comes too near, he hears the bird utter the notes "*pic-pic*," and before he can again get a glance at it, the noise of the quick beats of its wing reaches his ear, and he sees the creature disappear with a rise-and-fall flight into an adjoining copse. This bird also often repeats that peculiar rattle that *P. major* is heard to do at home. The noise may well be imitated by pressing one end of a stick on a table

and suddenly pushing down the projecting end; the *whirr* thus caused by the vibration will give a good idea of the sound the bird produces. The species seldom alights on the ground, except at the margin of a pool to drink; but it frequently descends to the long maize and millet stalks, and taps them for worms.

83. SMALL PIED WOODPECKER. *Picus* —— ?

A species closely allied to *P. kisuki* of the 'Fauna Japonica,' and to *P. hardwickii* of the Himalayas, but evidently differing from both. I send home two pairs. It was very common, but seldom observable to any but a watchful eye, as it affected the tip-top branches of the highest trees. It remains for long spaces of time on one bough, and does not show half the alacrity in the pursuit of its food that the other species do. It generally prefers the thin dead branches at the tops of forest trees, where, no doubt, it finds a plentiful supply of small maggots, many of which I have taken from the stomachs of those shot. Its cry is a weak attempt at "*pic-pic*;" and its flight, undulatory as in the former instances, is remarkable also for the same noise, produced by quick successive beats of the wing. This peculiar sound of the wings I have also observed in *Parus palustris* of this place, made as the little fellow drops from a high branch down to a lower.

84. CUCKOO. *Cuculus striatus*, Drapiez.

Very common in August and September. I send a male and a female.

85. GREY PERICROCOTE. *Pericrocotus cinereus*, La Fresn.

Common in September. It is strange that this tropical form should be found so far north*.

86. DRONGO. *Dicrurus macrocerus* (Lath.).

Common in September.

87. LUZONIAN SHRIKE. *Lanius luzoniensis*, Strickland.

In a cage only. But as the migration of this bird commences early, that may account for its non-appearance.

88. JAPAN SHRIKE. *Lanius bucephalus*, Temm. & Schl.

Not common. I send an immature specimen shot in September.

* It is found in summer as far north as the Lower Amoor. See v. Schrenck's *op. cit.* p. 381.—Ed.

89. CHINESE ORIOLE. *Oriolus chinensis*, Scop.

Frequent in August and September.

90. LAPLAND TURTLE. *Turtur orientalis* (Lath.).

The only Dove observed. It is found during winter all down the coast as far as Hongkong.

91. RING-NECKED PHEASANT. *Phasianus torquatus*.

We never met with these birds alive, but some were brought for sale to Tangkoo and Tientsin, and the natives assured us they were captured in the neighbourhood.

92. BUTTON QUAIL. *Turnix dussumieri*, Temminck.

Identified by Mr. Blyth, and wrongly named in my Amoy list as *T. jondera*, Hodgson. One of this species was shot in September in a millet field. The same bird is found in spring all down the coast as far south as Hongkong.

93. QUAIL. *Coturnix dactylisonans*.

Very common, even as late as October, in which month immense flocks of them dropped in the neighbourhood of the Taku forts, evidently birds from more northerly parts bound south.

94. PALLAS' SAND-GROUSE. *Syrhaptes paradoxus* (Pall.).

Your readers will be both surprised and delighted to hear of the abundant occurrence of this species during winter about the plains between Peking and Tientsin. Flocks of hundreds constantly pass over with a very swift flight, not unlike that of the Golden Plover, for which we at first mistook them. The market at Tientsin was literally glutted with them, and you could purchase them for a mere nothing. The natives called them "Sha-chee" or Sand-fowl, and told me they were mostly caught in clapnets. After a fall of snow their capture was greatest; for where the net was laid the ground was cleared and strewed with small green beans. The cleared patch was almost sure to catch the eyes of the passing flocks, who would descend and crowd into the snare. It only remained then for the fowler, hidden at a distance, to jerk the strings, and in his haul he would not unfrequently take the whole flock. Numbers, however, were shot with matchlocks. When on the ground they were rather shy and difficult of approach, but on the wing they

would sometimes dart within a few yards of you. They possess rather a melodious chuckle, the only note that I have heard them utter. The natives say that, during the summer, they are found abundantly in the great plains of Tartary beyond the Great Wall, where they breed in the sand.

95. PRATINCOLE. *Glareola orientalis*, Lath.

Common about the marshes near Takoo, where they most certainly breed.

96. VIRGINIAN PLOVER. *Charadrius virginicus*.

97. BUSTARD PLOVER. *Squatarola helvetica*, L.

A specimen kept in an aviary at Amoy showed no change in the plumage all the summer through, retaining the while its winter white breast.

98. LAPWING. *Vanellus cristatus*.

A flock of these birds flapped close over me one cold day in November. It was the only time I saw them.

99. LESCHENAULT'S PLOVER. *Ægialites leschenaultii*.

100. KENTISH PLOVER. *Ægialites cantianus*.

101. PHILIPPINE PLOVER. *Ægialites philippinus*.

102. TURNSTONE. *Streptilas interpres*.

103. SANDERLING. *Calidris arenaria*.

104. OYSTER-CATCHER. *Hæmatopus ostralegus*.

105. CHINESE SNIPPIT. *Tringa subarquata*.

106. SNIPPIT. *Tringa* — ?

This bird occurred in great abundance in the marshes during August. It is new to me, so I enclose the only three specimens procured for Mr. Sclater's inspection.

107. MINUTE SNIPPIT. *Tringa minuta*.

108. TEMMINCK'S SNIPPIT. *Tringa temminckii*.

109. LESSER SNIPPIT. *Tringa* — ?

This I have procured before at Amoy; and though pronounced identical with *T. minuta* by Mr. Blyth, I cannot help thinking it different, and in all probability a new species. I enclose a specimen. Compare this bird's feet with those of *T. minuta*.

110. ROCK TAIL-WAGLER. *Tringoides hypoleucus*, L.

111. GREEN SANDPIPER. *Totanus ochropus*, L.

112. WOOD SANDPIPER. *Totanus glareola*, L.

113. DUSTY SANDPIPER. *Totanus pulverulentus*.

114. RED-SHANKED SANDPIPER. *Totanus calidris*, L.

Tientsin market in December.

115. WHISTLING SANDPIPER. *Totanus glottoides*.

116. AVOCET. *Recurvirostra avocetta*.

I saw this bird on the banks of the Peiho in November. It was frequent in Tientsin market.

117. WOODCOCK. *Scolopax rusticola*, L.

118. CHINESE SNIPE. *Gallinago megala*, n. sp.

Mr. Blyth has pronounced on a specimen of this bird forwarded to him from Amoy, that it is identical with *G. major*: now I am convinced that it is not. It resembles the Great Snipe, no doubt, in general appearance, but the Great Snipe has *sixteen* obtuse tail-feathers: this bird has *twenty*, five of which on each side are short and narrowed; the outermost being the shortest and the narrowest, the next longer and broader; and so on until the ten centre ones are reached, which are pretty much about of an equal length and of an equal breadth. It approaches, on the other hand, much nearer *G. stenura*, Temm., from which, however, it is at once distinguishable by its larger size, and by the fewer and broader *lateral* tail-feathers; *G. stenura* having, if I recollect right, *seven* very short and very narrow lateral rectrices on each side. I enclose a specimen.

119. NARROW-TAILED SNIPE. *Gallinago stenura*, Temminck.
Very common in August and September.

120. SNIPE. *Gallinago uniclava*, Hodgson.
Closely allied to the European species. Also very common.

121. CURLEW. *Numenius major*, Schlegel.

It is hard to discover any difference between this and *N. arcuatus*. Very common in August in the marshes.

122. HERON. *Ardea cinerea*, L.

Common.

123. SMALL BLACK AND WHITE HERON. *Ardea* — ?

I several times put up a small black and white Heron; but as I was unable to procure specimens, I cannot assign it to any particular species. It may have been *A. goisagi* of the 'Fauna Japonica.'

124. INTERMEDIATE EGRET. *Herodias intermedia*.

I saw one of this species standing in a pool in August; it was much larger than *H. garzetta* and smaller than *H. alba*, and had a yellow bill.

125. NIGHT HERON. *Nycticorax griseus* (Linn.).

Common.

125a. SPOONBILL. *Platalea leucorodia*, L.126. COOT. *Fulica atra*, L.

Of frequent occurrence on the Yun-leang Canal. I shot one out of a pair.

127. CRESTED GREBE. *Podiceps cristatus*, L.128. EARED GREBE. *Podiceps auritus*, L.129. PHILIPPINE DABCHICK. *Podiceps philippinus*, L.130. GREY LAG. *Anser feras*, L.131. BEAN GOOSE. *Anser segetum*, L.132. WHITE-FRONTED GOOSE. *Anser albifrons*.133. SWAN-GOOSE. *Anser cygnoides*, Pallas.

It is difficult to believe that the wild bird is the parent of the domestic Knotted Goose, so different do they look on comparison.

134. SMALL SWAN. *Cygnus minor*, Pallas.135. GOOSANDER. *Mergus merganser*, L.136. SAW-BILL. *Mergus serratus*, L.137. SWAN. *Mergus albellus*, L.138. SHELDRAKE. *Tadorna vulpanser*.139. RUDDY SHELDRAKE. *Casarca rutila*.140. MALLARD. *Anas boschas*, L.141. BAIKAL TEAL. *Querquedula glocitans* (Pall.).

142. FALCATED TEAL. *Querquedula falcaria* (Pallas).

I send a female of this species.

143. COMMON TEAL. *Querquedula crecca* (Linn.).

144. PINTAIL. *Dafila acuta* (Linn.).

145. WIGEON. *Mareca penelope* (Linn.).

146. SCAUP. *Fuligula marila* (Linn.).

147. TUFTED DUCK. *Fuligula cristata* (Leach).

148. GOLDEN-EYE. *Clangula glaucion* (Linn.).

I send a male and female of this species. The male was purchased in the Tientsin market; the female was shot by Major Sarel on the lakes in the Emperor's Summer Palace Park.

149. GREAT NORTHERN DIVER. *Colymbus glacialis*, L.

150. CORMORANT. *Phalacrocorax carbo* (Linn.).

Often seen on the inland waters.

151. COMMON GULL. *Larus canus*.

152. HERRING GULL. *Larus argentatus*.

153. BLACK-TAILED GULL. *Larus melanurus*, Temm. & Schl. Faun. Japon. pl. 88.

All these Gulls have been shot at Amoy, and are, I think, correctly identified.

154. KITTLITZ'S GULL. *Gavia kittlitzii*.

155. GULL. *Gavia* —?

A species with red bill, black towards tip, and orange-ochre legs; somewhat allied to *G. ridibunda*.

156. CASPIAN TERN. *Sterna caspia*, L.

157. SWIFT TERN. *Sterna velox*, Rüppell.

158. LESSER TERN. *Sterna minuta*, L.

159. JAVAN TERN. *Hydrochelidon javanica* (Horsf.).

All these Gulls and Terns were common about the marshes in August and September. Of the last I send a few specimens.