

the track of the discoverers, were amply rewarded for the first few years by most abundant success; since the produce that in any one year has been brought to England from those newly-discovered portions of the Arctic Seas, is more than sufficient to cover the whole expenses of all the Expeditions of Discovery that have been sent, during the last twenty years, to those regions: and yet people, not aware of this circumstance, are perpetually asking what benefit can result to this country from such undertakings!

The Whale, however, still continues to retire from the persecutions of man; and the numbers of its young which are annually destroyed without remorse by the avaricious but imprudent fishermen, must soon exhaust the fishery; and search must then be made far to the westward of Baffin's Bay, and to the eastward of Spitzbergen, for their places of retreat.

We found them in considerable numbers as low as the latitude of 71° N, along the western shore of Prince Regent's Inlet; and the whole line of coast is crowded with the remains of Esquimaux winter huts, which had been chiefly constructed of the crown bones of the young Whale.

The natives of the Isthmus of Boothia say, that it is but rarely seen either on the east or west side of the Isthmus; and they, not being sufficiently well prepared, or in sufficient numbers, never venture to attack it. Only two were seen by us during the three years we were frozen up in that neighbourhood.

A most interesting account of the Whale fishery is given by Captain Scoresby, *loc. cit.*, where its importance to Great Britain, as a nursery for seamen, employment of capital, and as a source of national wealth, is made sufficiently manifest.

BIRDS

1.—FALCO ISLANDICUS (*Jerfalcon*).

FALCO ISLANDICUS.—*Rich : Faun. Bor. Amer.*—vol. ii., p. 27. *Lath : Ind. Orn.*—vol. i., p. 32.

Cuv : Règ. Anim.—vol. i., p. 323.

Sub : Græcul. Birds, in Trans. Lin. Soc.—vol. xii., p. 523. *Temm.*—vol. i., p. 17.

WHITE JERFALCON.—*Lath : Syn.*—vol. i., p. 83; and *Supp.*—p. 21.

Several were seen about Victoria Harbour, pursuing the packs of young Grouse, in August and September, 1832; and a pair built their nest a short distance to the south of Felix Harbour. No specimens, however, were obtained by us.

2.—STRIX NYCTEA (*Snowy Owl*).

STRIX NYCTEA.—*Rich : Faun. Bor. Amer.*—vol. ii., p. 88. *Lath : Ind. Orn.*—vol. i., p. 57.

Cuv : Règ. Anim.—vol. i., p. 345. *Temm.*—vol. i., p. 82.

Fab : Faun. Græcul.—p. 60; and in *Appendices to Parry's 1st, 2d, and 3d Voyages*.

SNOWY OWL AND WHITE OWL.—*Arct. Zool.*—vol. ii., p. 233. *Lath : Syn.*—vol. i., p. 132.

Was occasionally seen throughout the winter about Victoria Harbour, where several pairs had bred in the preceding autumn, but none were obtained by us.

3.—*ALAUDA CORNUTA* (*Shore Lark*).

ALAUDA CORNUTA.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 245.

ALAUDA ALPESTRIS.—*Forst: Phil. Trans.*—lxii., p. 398. *Lath: Ind. Orn.*—vol. ii., p. 498.

Cuv: Règ. Anim.—vol. i., p. 400. *Temm.*—vol. i., p. 279.

Rich: App. to Parry's 2d Voyage.—p. 343.

SHORE LARK.—*Penn: Arct. Zool.*—vol. ii., p. 392.

One shot by us, near Felix Harbour, agreed well with the descriptions of authors. Two others were all that were seen by us; it is therefore but rarely met with above the 70° of latitude.

4.—*SYLVIA CENANTHE* (*Wheatear*).

SYLVIA CENANTHE.—*Temm.*—vol. i., p. 135. *Lath: Ind. Orn.*—vol. ii., p. 529.

Sabine, in Trans. Linn. Soc.—vol. xii., p. 531.

MOTACILLA CENANTHE.—*Cuv: Règ. Anim.*—vol. i., p. 382.

Fab: Faun. Grænl.—p. 122.

WHEATEAR.—*Lath: Syn.*—vol. iv., p. 465. *Arct. Zool.*—vol. ii., p. 420.

One of these little birds was observed flying round the ship in Felix Harbour on the 2d of May, 1830, and was found dead alongside, the next morning: having arrived before the ground was sufficiently uncovered to enable it to procure its food, it had perished from want. It is the only instance of this bird having been met with in Arctic America, in the course of our several Expeditions to those regions.

I do not find it mentioned by Dr. Richardson, in the "*Fauna Boreali Americana*." Fabricius found it in Greenland; and several were seen by us, on our first voyage, off Cape Farewell in October, 1818.

5.—EMBERIZA NIVALIS (*Snow Bunting*).

- EMBERIZA NIVALIS.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 246. *Lath: Ind. Orn.*—vol. i., p. 397.
Cuv: R g. Anim.—vol. i., p. 405. *Temm.*—p. 319. *Gmel.*—vol. i., p. 866.
Fab: Faun. Gr nl.—p. 117. *Sabine, in Trans. Linn. Soc.*—vol. xii., p. 532.
Rich: in App. to Parry's 2d Voyage.—p. 343.
 SNOW BUNTING.—*Brit. Zool.*—vol. i., p. 444. *Arct. Zool.*—vol. ii., p. 355.
Lath: Syn.—vol. iii., p. 161.

Abounds in all parts of the Arctic Regions, between the middle or end of April and the end of September.

6.—PLECTROPHANES LAPPONICA (*Lapland Finch*).

- PLECTROPHANES LAPPONICA.—*Ross, in App. to Parry's 3d Voyage*—p. 97.
Selby, in Trans. Lin. Soc.—vol. xv., p. 156, pl. 1 (young).
Rich: Faun. Bor. Amer.—p. 248, pl. 48 (excellent).
 PLECTROPHANES CALCARATA.—*Meyer: Tasch.*—vol. iii., p. 176.
 EMBERIZA CALCARATA.—*Temm.*—vol. i., p. 322. *Rich: in App. to Parry's 2d Voyage*—p. 345.
 LAPLAND FINCH.—*Arct. Zool.*—vol. ii., p. 377. *Lath: Syn.*—vol. iii., p. 263.

Is by no means numerous in the higher northern latitudes. A nest with five eggs was brought on board early in July, 1830.

7.—CORVUS CORAX (*Raven*).

- CORVUS CORAX.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 290. *Lath: Ind. Orn.*—vol. i., p. 150.
Cuv: R g. Anim.—vol. i., p. 420. *Temm.*—p. 107. *Gmel.*—vol. i., p. 364.
Fab: Faun. Gr nl.—p. 62. *Rich: App. to Parry's 2d Voyage*—p. 343.
Ross, App. to Parry's 3d Voyage—p. 97.
 RAVEN.—*Lath: Syn.*—vol. i., p. 367. *Arct. Zool.*—vol. ii., p. 245.

This is one of the few birds that are capable of braving the severity of an Arctic

winter and of enduring the scorching rays of a tropical sun, without any change being produced in its plumage by the extremes of climate. Cuvier and other authors mention, that in the north it is frequently found more or less white: we never saw any thing corroborative of such an observation. It preserves its plumage and peculiar characteristics unchanged, in every part of the globe.

8.—TETRAO LAGOPUS MUTUS (*Ptarmigan*).

TETRAO LAGOPUS MUTUS.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 350.

TETRAO LAGOPUS.—*Cuv: Règ. Anim.*—vol. i., p. 482. *Lath: Ind. Orn.*—vol. ii., p. 639.

Fab: Faun. Grænl.—p. 114. *Sabine, Supp. to Parry's 1st Voy.*—p. cxvii.

Rich: App. to Parry's 2d Voyage—p. 350.

Ross, App. to Parry's 3d Voy.—p. 99; and *App. to Parry's Polar Voy.*—p. 193.

PTARMIGAN.—*Brit. Zool.*—vol. i., p. 359, pl. 57. *Lath: Syn.*—vol. iv., p. 744. *Arct. Zool.*—p. 315.

Is not so numerous in the higher northern latitudes as the two following species. A pair was shot on the east side of the Peninsula of Boothia, in latitude 71° nearly; and three or four more were obtained at Felix Harbour.

9.—TETRAO LAGOPUS SALICETI (*Willow Grouse*).

TETRAO LAGOPUS SALICETI.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 351.

TETRAO SALICETI.—*Cuv: Règ. Anim.*—vol. i., p. 483. *Temm.*—vol. ii., p. 471.

Sabine, App. to Franklin's 1st Journey—p. 681.

Rich: App. to Parry's 2d Voyage—p. 347.

TETRAO ALBUS.—*Lath: Ind. Orn.*—vol. ii., p. 639. *Gmel.*—vol. i., p. 750.

Ross, in App. to Parry's 3d Voyage—p. 101.

WHITE GROUSE.—*Lath: Syn.*—vol. iv., p. 743. *Arct. Zool.*—vol. ii., p. 308.

WILLOW PARTRIDGE.—*Hearne's Travels*—p. 338.

Inhabits both shores of the inlet to the west of Boothia; but is not to be found on

the east side of the Peninsula, seeming to prefer the low limestone formation to that of the high rugged granite, which appears more peculiarly adapted to the habits of the Rock Grouse and the Ptarmigan.

10.—TETRAO LAGOPUS RUPESTRIS (*Rock Grouse*).

TETRAO LAGOPUS RUPESTRIS.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 354, pl. 64, fem.

TETRAO RUPESTRIS.—*Sab: Supp. to Parry's 1st Voy.*—p. cxcv.

Rich: App. to Parry's 2d Voy.—p. 348.

Ross, App. to Parry's 3d Voy.—p. 99.

Lath: Ind. Orn.—vol. ii., p. 640. *Gmel.*—vol. i.,

ROCK GROUSE.—*Arct. Zool.*—vol. ii., No. 184. *Lath: Syn. Supp.*—p. 217.

Is much more numerous in the higher northern latitudes than either of the two preceding species. It frequents the eastern side of the Peninsula of Boothia; but was not found to the westward.

11.—COLUMBA MIGRATORIA (*Passenger Pigeon*).

COLUMBA MIGRATORIA.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 363.

Sab: App. to Franklin's Jour.—p. 679.

Cuv: R g. Anim.—vol. i., p. 488.

Forster, in Phil. Trans. Roy. Soc.—vol. lxi., p. 396.

PASSENGER PIGEON.—*Arct. Zool.*—vol. ii., p. 322.

A young male bird flew on board the victory during a storm, whilst crossing Baffin's Bay in latitude $73\frac{1}{2}^{\circ}$ N, on the 31st of July, 1829. It has never before been seen beyond the sixty-second degree of latitude; and the circumstance of our having met with it so far to the northward, is a singular and interesting fact.

It is well known, from the dreadful devastation it commits in the rice-fields of America; and the accounts which authors give of the inconceivable multitudes that occasionally assemble together, are quite incredible. See Wilson's "*American Ornithology*," vol. ii., p. 299.

12.—CHARADRIUS SEMIPALMATUS (*American Ring Plover*).CHARADRIUS SEMIPALMATUS.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 367.CHARADRIUS HIATICULA.—*Temm.*—p. 539. *Cuv: Règ. Anim.*—vol. i., p. 501.*Sabine, in Franklin's Journey*—p. 684.*Sub: Supp. to Parry's 1st Voyage*—p. cc.*Rich: App. to Parry's 2d Voyage*—p. 351.*Sub: in Trans. Linn. Soc.*—vol. xii., No. 10.

Very numerous during the summer months in Boothia, inhabiting the marshy grounds, and feeding chiefly on the larvæ of the *Tipula Arctica* (of Curtis).

13.—CHARADRIUS PLUVIALIS (*Golden Plover*).CHARADRIUS PLUVIALIS.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 369.*Cuv: Règ. Anim.*—vol. i., p. 501. *Lath: Ind. Orn.*—vol. ii., p. 740.*Gmel.*—vol. i., p. 688. *Fab: Faun. Grænl.*—No. 79.*Temm.*—vol. ii., p. 535. *Sabine, Franklin's Journey*—p. 683.*Sabine, Supp. to Parry's 1st Voyage*—p. cxcix.*Ross, App. to Parry's 3d Voyage*—p. 683.GOLDEN PLOVER.—*Arct. Zool.*—vol. ii., p. 483.

Abundant during the breeding season in most parts of the Arctic Regions. We found them plentifully in the neighbourhood of Felix Harbour, feeding in the marshes, in company with the preceding species.

14.—VANELLUS MELANOGASTER (*Grey Lapwing*).VANELLUS MELANOGASTER.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 370.*Cuv: Règ. Anim.*—vol. i., p. 502.*Sabine, Franklin's Journey*—p. 684.*Rich: App. to Parry's 2d Voyage*—p. 352.SWISS SANDPIPER.—*Arct. Zool.*—vol. ii., p. 478.

Is somewhat larger than the Golden Plover, with which it has been frequently

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confounded. It is also more rarely met with; but was found by us breeding near the margins of the marshes immediately to the south-west of Fury Point, in considerable numbers.

Some specimens were also obtained near Felix Harbour.

15.—STREPSILAS INTERPRES (*Turnstone*).

STREPSILAS INTERPRES. *Rich: Faun. Bor. Amer.*—vol. ii., p. 371.

Cuv: Règ. Anim.—vol. i., p. 529.

STREPSILAS COLLARIS.—*Temm.*—vol. ii., p. 553. *Sabine, Franklin's Journey*—p. 684.

Sab: Supp. to Parry's 1st Voyage—p. cc.

Rich: App. to Parry's 2d Voyage—p. 352.

TURNSTONE.—*Edwards*—pl. 141.

Is still more rare than the preceding, and only one specimen was obtained, early in July, at Felix Harbour; it was a female in full breeding plumage. Some others were seen by us, as we travelled along the coast between Victoria Harbour and Fury Point, about the middle and towards the end of June.

16.—GRUS CANADENSIS (*Brown Crane*).

GRUS CANADENSIS.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 373. *Cuv: Règ. Anim.*—vol. i., p. 519.

BROWN CRANE.—*Penn: Arct. Zool.*—vol. ii., p. 443.

Several individuals of a species of Crane were seen by us in the neighbourhood of Fury Beach; they were probably of the abovenamed species, but as no specimen was obtained, it cannot be identified with certainty.

17.—TRINGA MARITIMA (*Purple Sandpiper*).

- TRINGA MARITIMA.—*Rich : Faun. Bor. Amer.*—vol. ii., p. 382. *Cuv : Règ. Anim.*—vol. i., p. 525.
Sab : Trans. Linn. Soc.—vol. xii., p. 532. *Temm.*—vol. ii., p. 619.
Sab : Supp. to Parry's 1st Voy.—p. cci. *Rich : App. to Parry's 2d Voy.*—p. 354.
 STRIATED SANDPIPER.—*Arct. Zool.*—vol. ii., p. 472. *Lath : Syn.*—vol. v., p. 176.

But few individuals of this species were seen near our watering stations; we found them, however, in considerable numbers near Fury Point; and at Melville Island, on a former voyage, they were very numerous.

18.—TRINGA ALPINA (*American Dunlin*).

- TRINGA ALPINA.—*Rich : Faun. Bor. Amer.*—vol. ii., p. 383.
Sabine, Trans. Linn. Soc.—vol. xii., p. 533.
 TRINGA VARIABILIS.—*Sabine, Franklin's Journey*—p. 686. *Temm.*—vol. ii., p. 612.
Sab : Supp. to Parry's 1st Voyage—p. cc.
Rich : App. to Parry's 2d Voyage—p. 353.
 DUNLIN.—*Penn : Arct. Zool.*—vol. ii., p. 476.

Is very abundant during the breeding season near Felix Harbour, building its nest in the marshes and by the sides of the lakes.

19.—PHALAROPUS FULICARIUS (*Flat-billed Phalarope*).

- PHALAROPUS FULICARIUS.—*Rich : Faun. Bor. Amer.*—vol. ii., p. 407.
 PHALAROPUS PLATYRHYNCHUS.—*Cuv : Règ. Anim.*—vol. i., p. 528. *Temm.*—vol. ii., p. 712.
Sabine, Trans. Linn. Soc.—vol. xii., p. 536.
Sab : Supp. to Parry's 1st Voyage—p. cci.
Rich : App. to Parry's 2d Voyage—p. 355.
Ross, App. to Parry's 3d Voyage—p. 102.

Temminck's and Sabine's descriptions are excellent. Dr. Richardson's is taken from an individual killed in the Columbia River, and is of unusually small dimensions: of

above twenty measured by me, the smallest exceeded 8 inches in length, and the average of that number was rather more than $8\frac{1}{2}$ inches; he states the extreme length of his specimen to be only 7 inches. The females are larger than the males. Twelve of them together weighed 21 ounces, or $1\frac{1}{2}$ ounces each.

20.—STERNA ARCTICA (*Arctic Tern*).

STERNA ARCTICA.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 414. *Temm.*—vol. ii., p. 742.
Sabine, Franklin's Journey—p. 694. *Sab: Supp. to Parry's 1st Voy.*—p. ccii.
Rich: App. to Parry's 2d Voyage—p. 356.
Ross, App. to Parry's 3d Voyage—p. 103; and *App. to Parry's Polar Voyage*—p. 194.

Very scarce, both to the east and west of the Peninsula of Boothia, only five or six having been seen by us during the three years we were in that neighbourhood.

It has lately been found abundantly on the west coast of Ireland, in the winter season.

21.—LARUS GLAUCUS (*Glaucous Gull*).

LARUS GLAUCUS.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 417.
Cuv: R2g. Anim.—vol. i., p. 556. *Temm.*—vol. ii., p. 757.
Sab: Trans. Linn. Soc.—vol. xii., p. 543.
Sab: App. to Parry's 1st Voyage—p. cciii.
Ross, App. to Parry's 3d Voyage—p. 103.
GLAUCOUS GULL.—*Arct. Zool.*—vol. ii., p. 532. *Lath: Syn.*—vol. vi., p. 374.

Numbers of this magnificent species of Gull built their nests on the upper part of the face of a high precipice, two or three miles to the south of Felix Harbour; and the whole line of precipitous rock that forms the western shore of Prince Regent's Inlet, is annually resorted to by them in the breeding season. Although feeding chiefly on

fish, the young bird is scarcely inferior either in delicacy of flavour or colour to the tenderest chicken: the old ones, however, are not quite so palatable, and smell most offensively after being kept a day or two.

22.—LARUS ARGENTATUS (*Black-winged Silvery Gull*).

- LARUS ARGENTATUS.—*Gmel.*—vol. i., p. 600. *Temm.*—vol. ii., p. 764.
Rich: App. to Parry's 2d Voyage—p. 358.
Ross, App. to Parry's 3d Voyage—p. 104.
 SILVERY GULL.—*Arct. Zool.*—vol. ii., p. 533. *Lath: Syn.*—vol. vi., p. 375.
 HERRING GULL.—*Arct. Zool.*—vol. ii., p. 527.

The individuals of this species obtained during our late voyage, agreed sufficiently with the descriptions above referred to, except perhaps that the markings on the primary quill feathers are not quite so dark as in European specimens.

Dr. Richardson has referred the examples of this bird, brought to England on our former voyages from Melville Island and Melville Peninsula, to the *Larus Argentatoides* of the Prince of Musignano. (*Faun: Bor. Amer.*—p. 417.)

23.—LARUS LEUCOPTERUS (*White-winged Silvery Gull*).

- LARUS LEUCOPTERUS.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 418.
 LARUS ARGENTATUS.—*Sab: Trans. Linn. Soc.*—vol. xii., p. 546.
 LARUS ARCTICUS.—*M'Gillivray, Wer. Trans.*—vol. v., p. 268.

This bird abounds in Greenland and Iceland, and was first described many years ago by Dr. Edmonstone, of Shetland, in the *Wernerian Transactions*, under the name of the "*Less Iceland Gull*," from its general resemblance, except in size, to the *L. Glaucus*, which he had before described under the name of *Iceland Gull*. Captain Sabine, in his "*Memoir on the Birds of Greenland*," *loc. cit.*, was disposed to have

considered this a new and undescribed species; but in deference to Mr. Temminck, who conceived that the absence of the dark markings on the wings might be occasioned by the severity of the climate in which it was found, he classed it with the preceding species. Its distinctive characters are now, however, sufficiently well known: the specimens obtained by us during our late voyage, agreed most exactly with Captain Sabine's description above referred to.

It was found breeding on the face of the same precipice with the Glaucous, but at much less height, and in greater numbers.

It is not unfrequently met with at the Shetland Islands in the winter season, and may therefore be added to our catalogue of British Birds.

24.—LARUS EBURNEUS (*Ivory Gull*).

LARUS EBURNEUS.—Rich: *Faun. Bor. Amer.*—vol. ii., p. 419.

Phipps's Voyage, App.—p. 187. *Gmel.*—vol. i., p. 596.

Lath: Ind. Orn.—vol. ii. p. 816. *Temm.*—vol. ii., p. 769.

Sab: in Trans. Linn. Soc.—vol. xii., p. 548.

Supp. to Parry's 1st Voyage—p. cciv.

LARUS CANDIDUS.—*Fab: Faun. Grænl.*—p. 103, No. 67.

IWORY GULL.—*Penn: Arct. Zool.*—vol. ii., p. 529.

Although extremely numerous in Baffin's Bay, and frequently met with during our former voyages in the vicinity of Port Bowen, one of its breeding-places, yet few were seen by us after passing to the southward of that part of Prince Regent's Inlet; and only one specimen was obtained.

This beautiful species of Gull has lately visited the western shores of Ireland.

25.—LARUS TRIDACTYLUS (*Kittiwake*).

LARUS TRIDACTYLUS.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 423. *Temm.*—vol. ii., p. 774.

Fab: Faun. Grænl.—p. 98. *Lath: Ind. Orn.*—vol. ii., p. 817.

Sab: Supp. to Parry's 1st Voyage—p. ccv.

Rich: App. to Parry's 2d Voyage—p. 359.

Ross, in App. to Parry's 3d Voy.—p. 105; and *Polar Journey*—p. 195.

KITTIWAKE.—*Penn: Arct. Zool.*—vol. ii., p. 529. *Brit. Zool.*—vol. ii., p. 186.

Lath: Syn.—vol. vi., p. 393.

Inhabits all parts of the Arctic Regions, and has been met with in the highest latitudes yet attained by man.* It is extremely numerous during the summer season along the west coast of Prince Regent's Inlet; where, in several places that are peculiarly well fitted for breeding stations, they congregate in inconceivable numbers.

We killed enough to supply our party with several excellent meals, and found them delicious food, perfectly free from any unpleasant flavour.

26.—LARUS ROSSII (*Cuneate-tailed Gull*).

LARUS ROSSII.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 427.

Rich: App. to Parry's 2d Voyage—p. 359.

Ross, App. to Parry's Polar Voyage—p. 195.

Wilson's Illust. Zool.—vol. i., pl. 8.

LARUS ROSEUS.—*Jardine and Selby, Orn. Illust.*—p. 1, pl. 14.

Was discovered near Igloodik in June, 1823, where only two specimens were obtained, although many others were seen: it has since been found abundantly on the east side of Spitzbergen, and several pairs were observed by Sir Edward Parry's party beyond the 82° of latitude.* It is noticed here as occasionally visiting Boothia, on the authority of Mr. Abernethy, who reported to me that he had seen one fly over the ship in Felix Harbour. He had accompanied Sir Edward Parry on his Polar Journey, during which it was frequently seen; and, although unsuccessfully, eagerly pursued as an object of more than ordinary interest, from the circumstance of only two specimens of it having reached England: he is therefore not very likely to have been mistaken.

Dr. Richardson has accurately described its plumage; but the measures having been taken from the dried skin, differ triflingly from those taken by me of the recent specimens, *ut infra*:

Extreme length from the tip of the beak to the end of the tail . . .	13.6 inches
to the angle of the mouth . . .	1.3
Length of the tarsus	1.2
middle toe and nail	1.2
Extent of wing, 30 inches. Weight, 6 ounces.	

See Parry's Narrative of his Polar Journey, p. 81.

27.—*LARUS SABINI* (*Fork-tailed Gull*).*LARUS SABINI*.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 428.*Sabine (Mr.)*, *Trans. Linn. Soc.*—vol. xii., p. 520, pl. 29 (very good).*Sabine (Capt.)*, *Trans. Linn. Soc.*—vol. xii., p. 551; and *Supp. to Parry's 1st Voyage*—p. ccv.*Rich: App. to Parry's 2d Voyage*—p. 360.*Ross, App. to Parry's Polar Voyage*—p. 195.*XEMA COLLARIS*.—*Leach, in Ross's Voyage*, oct. edit.—vol. ii., p. 164.

Was discovered by Captain Sabine on the three islands of Baffin, during Captain Ross's first voyage to these regions in 1818, and described by Mr. Sabine with minute accuracy in the Transactions of the Linnæan Society, *loc. cit.*

Since that period it has been found in many parts of the Arctic Regions; at Spitzbergen, Igloolik, and Behring's Straits; and by our party as we travelled along the coast, a little to the southward of Cape Garry. I have no doubt that the low land where it was met with, is one of its breeding-places.

I have lately heard that it has also been found on the west coast of Ireland, so that it has a much more extensive range than was at first supposed; and it is the more extraordinary that it remained so long unknown to naturalists.

Only one specimen was obtained by us at Felix Harbour; it was shot by Dr. M'Diarmid, and was the only one seen during our three years' residence in that quarter. The Esquimaux informed me that it breeds in great numbers on the low land west of Neityelle.

Dr. Leach founds its generic distinction on the forcarture of the tail: for a similar reason the *L. Rossii* should also form the type of a new genus, no other known Gull having a cuneiform tail.

28.—*LESTRIS POMARINUS* (*Pomarine Jager*).*LESTRIS POMARINUS*.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 427. *Temm.* vol. ii., p. 793.*Sab: Supp. to Parry's 1st Voyage*—p. ccvi. *Rich: App. to Parry's 2d Voyage*—p. 361.*Ross, App. to Parry's 2d Voyage*—p. 105; and *Parry's Polar Voyage*—p. 196.

Is a larger bird and much more scarce than the common Arctic Jager. It varies

very much in colour, according to age, some being entirely of a uniform blackish-brown, and others more or less marked with lighter colours.

A nest with two eggs was found near Fury Point, by the margin of a small lake.

29.—LESTRIS PARASITICUS (*Arctic Jager*).

LESTRIS PARASITICUS.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 430. *Temm.*—vol. ii., p. 796.

Sab: Trans. Linn. Soc.—vol. xii., p. 551. *Supp. to Parry's 1st Voyage*—p. ccvi.

Rich: App. to Parry's 2d Voyage—p. 361. *Ross, App. to Parry's 3d Voyage*—p. 105; and *App. to Parry's Polar Voyage*—p. 196.

CATHARACTA PARASITICA.—*Fab: Faun. Grænl.*—p. 103.

The form and relative length of the central tail feathers of this bird vary so much according to age and other circumstances, as to have induced the belief of the existence of several distinct, but very nearly allied, species, and the differences observed in the plumage of the immature birds, materially tended to strengthen this idea. Temminck and Sabine were the first to point out the mistakes that preceding authors had made, and by giving accurate descriptions of the bird in every state of plumage from the egg to maturity, have prevented a recurrence of similar errors.

30.—PROCELLARIA GLACIALIS (*Fulmer Petrel*).

PROCELLARIA GLACIALIS.—*Temm.*—vol. ii., p. 802. *Lath: Ind. Orn.*—vol. ii., p. 823.

Fab: Faun. Grænl.—p. 86. *Gmel.* vol. i., p. 562. *Sab: Supp.*

to Parry's 1st Voyage—p. ccvi. *Ross, App. to Parry's 3d Voyage*—p. 106; and *App. to Parry's Polar Voyage*—p. 196.

FULMER PETREL.—*Lath: Syn.*—vol. iv., p. 403. *Penn: Arct. Zool.*—vol. ii., p. 534. *Brit. Zool.*—vol. ii., p. 203.

Abounds in most parts of the North Atlantic Ocean, but is peculiarly numerous in Hudson's Bay, Davis's Strait, and Baffin's Bay. It is also occasionally met with to the

westward of Lancaster Sound, and in Regent's Inlet, following the whale ships, and availing themselves of the success of the fishermen, by feeding off the carcase of the whale after it has been deprived of its blubber and turned adrift. It is often of essential service to those employed in the capture of the whale, by guiding them to those places where the fish are most numerous, and by giving notice of the first appearance of those animals at the surface of the water, by crowding to the spot from all quarters.

31.—SOMATERIA SPECTABILIS (*King Duck*).

SOMATERIA SPECTABILIS.—Rich: *Faun. Bor. Amer.*—vol. ii., p. 447.

ANAS SPECTABILIS.—Temm.—vol. ii., p. 851. Gmel.—vol. i., p. 507. Lath: *Ind. Orn.*—vol. ii., p. 845.

Fab: *Faun. Grænl.*—p. 63. Sab: in *Trans. Linn. Soc.*—vol. xii., p. 553.

Sab: *Supp. to Parry's 1st Voyage*—p. ccvii. Rich: *App. to Parry's 2d Voyage*—p. 371. Ross, *App. to Parry's 3d Voyage*—p. 106.

KING DUCK.—Penn. *Brit. Zool.*—vol. ii., p. 246. *Arct. Zool.*—vol. ii., p. 554. Lath: *Syn.*—vol. vi., p. 473.

Vast numbers of this beautiful duck resort annually to the shores and islands of the Arctic Regions in the breeding season, and have on many occasions afforded a valuable and salutary supply of fresh provision to the crews of the vessels employed on those seas. On our late voyage, comparatively few were obtained, although seen in very great numbers. They do not retire far to the south during the winter, but assemble in large flocks; the males by themselves, and the females with their young brood, are often met with in the Atlantic Ocean, far distant from any land, where the numerous crustaceous and other marine animals afford them abundance of food.

32.—SOMATERIA MOLLISSIMA (*Eider Duck*).

SOMATERIA MOLLISSIMA.—Rich: *Faun. Bor. Amer.*—vol. ii., p. 44.

ANAS MOLLISSIMA.—Temm.—vol. ii., p. 848. Gmel.—vol. i., p. 514. Lath: *Ind. Orn.*—vol. ii., p. 845.

Fab: *Faun. Grænl.*—p. 68. Sab: *Supp. to Parry's 1st Voyage*—p. ccviii.

Rich: *App. to Parry's 2d Voyage*—p. 370. Ross, *App. to Parry's 3d Voyage*—p. 106; and *Polar Voyage*—p. 197.

EIDER DUCK.—Penn: *Brit. Zool.*—vol. ii., p. 243. *Arct. Zool.*—vol. ii., p. 553.

Lath: *Syn.*—vol. vi., p. 479.

Is so similar in its habits to the preceding species, that the same remarks equally apply to both. This is, however, more generally known as a European bird, and is famous for the beautifully elastic down from which it receives its name. That of the *S. Spectabilis* is equally excellent, and is collected in great quantities by the inhabitants of the Danish colonies in Greenland, and forms a valuable source of revenue to Denmark. Vast quantities of this down is also collected on the coast of Norway, and in some parts of Sweden.

33.—HERALDA GLACIALIS (*Long-tailed Duck*).

- HERALDA GLACIALIS.—*Rich : Faun. Bor. Amer.*—vol. ii., p. 460.
 ANAS GLACIALIS.—*Temm.*—vol. ii., p. 860. *Gmel.*—vol. i., p. 529. *Lath : Ind. Orn.*—vol. ii., p. 864.
Sab : Trans. Linn. Soc.—vol. xii., p. 555. *App. to Parry's 1st Voyage*—p. ccviii.
Rich : App. to Parry's 2d Voyage—p. 373.
 ANAS HIEMALIS.—*Fab : Faun. Grænl.*—p. 71.
 LONG-TAILED DUCK.—*Penn : Brit. Zool.*—vol. ii., p. 268. *Arct. Zool.*—vol. ii., p. 566.
Lath : Syn.—vol. vi., p. 468.

The most noisy and most numerous of the ducks that visit the shores of Boothia. Being a quicker diver, and of more rapid and irregular flight, fewer of this species than of the other were shot. Its down is equally valuable with that of the two preceding species, but is of a darker colour. Its flesh is most excellent food.

The peculiar structure of the trachea of this and the two preceding birds, are described and figured by Captain Sabine, *loc. cit.*

34.—ANSER BERNICLA (*Brent Goose*).

- ANSER BERNICLA.—*Rich : Faun. Bor. Amer.*—vol. ii., p. 469.
 ANAS BERNICLA.—*Temm.*—vol. ii., p. 825. *Gmel.*—vol. i., p. 513. *Lath : Ind. Orn.*—vol. ii., p. 844.
Fab : Faun. Grænl.—p. 41. *Sab : in Franklin's Journey*—p. 698. *Sab : Supp. to Parry's 1st Voyage*—p. 207. *Rich : in App. to Parry's 2d Voyage*—p. 367.
Ross, Parry's Polar Voyage—p. 196.
 BRENT GOOSE.—*Penn : Brit. Zool.*—vol. ii., p. 151. *Arct. Zool.*—vol. ii., p. 551.
Lath : Syn.—vol. vi., p. 467.

This well-known winter inhabitant of the lochs and friths of the Scottish coast, is found during the summer months in the highest northern latitude that has yet been reached, but in no great numbers. It did not remain in the neighbourhood of Felix Harbour to breed, but several large flocks were seen on their way to the northward, of which only a few were shot. We found them in greater numbers near Fury Point, and along the low line of coast to the southward, which, abounding with extensive fresh-water lakes, is probably one of their breeding stations.

35.—ANSER HUTCHINSII (*The Less Canada Goose*).

ANSER HUTCHINSII.—*Rich : Faun. Bor. Amer.*—vol. ii., p. 470.

ANAS BERNICLA, β .—*Rich : App. to Parry's 2d Voyage*—p. 368.

These birds arrived in flocks about the middle of June, in the neighbourhood of Felix Harbour, and soon after dispersed in pairs to their breeding places. At Igloolik, the only place where we had before met with them, their nests were found in the marshes near the sea; but on this occasion several pairs constructed their nests on a ledge of rock near the foot of a high precipice; immediately above them the dovebies, looms, several species of gulls, and near its summit the jerfalcon and raven built their nests.

From three to four eggs were found in each nest, of a pure white, and of an oval form, measuring 3.1 inches by 2.1, and weighing from 1800 to 2000 grains.

The female bird is smaller than the male; to the measurements given by Dr. Richardson, which are very accurate, we may add that its extent of wing is fifty-two inches, and that it averages about four pounds and a half in weight.

Its flesh is of a most exquisite flavour.

36.—COLYMBUS GLACIALIS (*Great Northern Diver*).COLYMBUS GLACIALIS.—*Rich : Faun. Bor. Amer.*—vol. ii., p. 474.*Temm.*—vol. ii., p. 910. *Fab : Faun. Græn.*—p. 97.*Sab : Franklin's Journey*—p. 703.NORTHERN DIVER.—*Penn : Brit. Zool.*—vol. ii., pp. 165, 167, pl. 30. *Arct. Zool.*—vol. ii., p. 518.

Only three specimens of this magnificent bird were obtained, and in each of these a most striking difference was observed in the colour of the bill, from the usual descriptions of authors. In our specimens the bill being of a very light horn colour, whilst in the European bird it is described as being black. There are other differences in the relative measurements of our bird, which will be more manifest by comparing the dimensions given by Dr. Richardson, *loc. cit.*, with the mean of the measurements of our three specimens.

Extreme length	. 36 inches.	Mean of our specimens	31.4 inches
Tail	. . . 4	. . . . .	2.7
Bill above	. 3.1	. . . . .	3.65
to rictus	. 4.6	. . . . .	5.42
Tarsus	. . 4.4	. . . . .	4.2
Extent of wing	48	. . . . .	58
Weight	. . . . .	10 pounds.	

Thus it appears that our bird, though four inches and a half shorter, has a bill eight-tenths of an inch longer, and ten inches greater extent of wing than that described by Dr. Richards m. I should have been disposed to agree with Wilson in supposing that there are two species, and have assigned to the Boothian Divers a new specific name; but on communicating with my friend Joseph Sabine, Esq., whose ornithological experience is only exceeded by the ready assistance he affords to whoever may wish to avail themselves of his high authority, I am now induced to concur with him in the belief that the lighter colour of the bill may be occasioned by age, more especially as no difference of any importance could be detected in the colours of the plumage.

37.—COLYMBUS ARCTICUS (*Black-throated Diver*).COLYMBUS ARCTICUS.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 475.*Temm.*—vol. ii., p. 913. *Rich: App. to Parry's 2d Voyage*—p. 376.BLACK-THROATED DIVER.—*Penn: Arct. Zool.*—vol. ii., p. 520.

This beautiful species of Diver was but rarely met with by us, and only two specimens were obtained.

It is found abundantly in Greenland, which seems to be its chief breeding place. The natives make an inner dress of the richly-coloured velvet-like plumage of the throat of this and the following species, which being worn next to the skin, is the warmest and most luxurious dress that can be made.

38.—COLYMBUS SEPTENTRIONALIS (*Red-throated Diver*).COLYMBUS SEPTENTRIONALIS.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 475. *Temm.*—vol. ii., p. 916.*Gmel.*—vol. i., p. 586. *Lath: Ind. Orn.*—vol. ii., p. 801.*Fab: Faun. Grænl.*—p. 94. *Sab: Trans. Linn. Soc.*—vol. xii.,p. 542. *Supp. to Parry's 1st Voyage*—p. ccix. *Rich:**App. to Parry's 2d Voyage*—p. 337. *Ross, App. to Parry's**3d Voyage*—p. 106; and *Parry's Polar Voyage*—p. 197.RED-THROATED DIVER.—*Penn: Brit. Zool.*—vol. ii., p. 169. *Arct. Zool.*—vol. ii., p. 520.*Lath: Syn.*—vol. vi., p. 344.

Much more abundant in Boothia than either of the two preceding species, and has been found in every part of the Arctic Regions visited by the late expeditions.

39.—URIA BRUNNICHII (*Brunnichs Guillemot*).

URIA BRUNNICHII.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 477. *Temm.*—vol. ii., p. 924.
Sab: Trans. Linn. Soc.—vol. xii., p. 538. *Supp. to Parry's 1st Voy.*—p. ccix.
Rich: App. to Parry's 2d Voy.—p. 377. *Ross, App. to Parry's 3d Voy.*—
 p. 106; and *Parry's Polar Voyage*—p. 197.

Captain Sabine, in his valuable memoir on the birds of Greenland, was the first to point out the mistaken notions of preceding authors with respect to this bird, and to rescue it from the confusion into which wrong synonyms and imperfect descriptions had involved it; and in distinguishing it by the name of Brunnich, paid a well-merited tribute to the indefatigable research and accuracy in observation of that learned naturalist.

It abounds in Baffin's Bay, and is found in most parts of the Arctic Seas. I have also met with it at Unst, the northernmost of the Shetland Islands, and in several parts of Scotland; but it has ever been confounded by authors, with the *Uria Troille*, which it so nearly resembles.

Captain Sabine and Brunnich* have clearly marked the distinctive specific characters of this species.

40.—URIA GRYLLE (*Black Guillemot*).

URIA GRYLLE.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 478. *Temm.*—vol. ii., p. 925.
Fab: Faun. Grænl.—p. 92. *Sab: Trans. Linn. Soc.*—vol. xii., p. 540.
Sab: Supp. to Parry's 1st Voy.—p. ccix. *Rich: App. to Parry's 2d Voy.*—p. 377.
Ross, App. to Parry's 3d Voyage—p. 107; and *Polar Voyage*—p. 197.
 BLACK GUILLEMOT.—*Penn: Brit. Zool.*—vol. ii., p. 163. *Arct. Zool.*—vol. ii., p. 516.

This well-known beautiful little bird is found during the summer months in all parts of the Arctic Seas, and is the only water-fowl that remains in very high northern latitudes throughout the winter.

* Brunnichii Ornithologia Borealis (*Uria Troille*), No. 109.

Dr. Richardson has already described its plumage, during that season of the year, with minute accuracy, from some specimens that were shot by me near Igloodik, in March, 1823. One individual only was obtained by us during the winter; although several others were seen off Fury Point, in February, 1833.

It was subsequently met with in great numbers as we travelled along the high precipitous land between Fury Point and Batty Bay, where they collected in vast quantities during the breeding season, affording to our party many delicious meals, and proving a valuable addition to our then scanty stock of provision. Several thousands were shot by our sportsmen, and by means of this providential supply of fresh food, several of the men, that had been long afflicted with that most dreadful malady, the sea scurvy, were restored to health.

It is not equal in flavour to the preceding species, but is much more numerous and more extensively dispersed along the coasts of the Arctic Seas.

41.—URIA ALLE (*Little Guillemot*).

URIA ALLE.—*Rich: Faun. Bor. Amer.*—vol. ii., p. 479. *Temm.*—vol. ii., p. 928.

Sab: Supp. to Parry's 1st Voyage—p. ccx. *Ross, App. to Parry's 3d Voyage*—p. 107; and *Parry's Polar Voyage*—p. 197.

ALCA ALLE.—*Sab: Trans. Linn. Soc.*—vol. xii., p. 554. *Fab: Faun. Græul.*—p. 84.

LITTLE AUK.—*Penn: Arct. Zool.*—vol. ii., p. 512. *Lath: Syn*—vol. v., p. 327.

Collect during the breeding season in vast numbers along the north and east coast of Baffin's Bay, but are seldom to be met with far to the westward of Lancaster Sound. A few were seen by us near Leopold Island, and two or three specimens were obtained.

F I S H .

I.—CYCLOPTERUS MINUTUS.

CYCLOPTERUS MINUTUS.—*Pallas, Spicil. Zool.*—vol. vii., p. 12, pl. 3, figs. 7—9.

Fab : Faun. Grænl.—p. 135.

Pallas's description of this extraordinary and beautiful little fish is most perfect. It is the *Cycloptère Menu* of Lacepède,* the *Bouclier Menu* of Bonnaterre,† and probably the small species of this genus, alluded to by Mr. Couch, in his paper on the "Natural History of Fishes found in Cornwall," published in the fourteenth volume of the Transactions of the Linnæan Society, p. 87.

It is found in many parts of the Atlantic Ocean; Fabricius observed it in the southern parts of Greenland, and great numbers were taken by us from amongst the extensive floating patches of seaweed that are met with off that coast; but it has never been seen at any great distance to the northward of the Arctic circle.

It rarely much exceeds an inch in length, and is therefore not used by the natives of Greenland as food, but constitutes the chief means of subsistence to the several species of gulls which are seen hovering over those banks of seaweed in astonishing numbers.

* *Histoire des Naturelle Poissons*—tome ii., p. 60.

† *Planches de l'Encyclopédie Méthodique.*

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2.—LIPARIS COMMUNIS.

- LIPARIS COMMUNIS.—*Sab* : in *App. to Parry's 1st Voyage*—p. cxxii.
CYCLOPTERUS LIPARIS.—*Lacepède, Hist. Nat. Poissons*—vol. ii., p. 69.
Fab : *Faun. Grænl.*—p. 135, var. 1.
Bloch.—pl. 123, fig. 3. *Ross, App. to Parry's Polar Voy.*—p. 199.
CYCLOPTERUS GELATINOSUS?—*Pallas, Spicil. Zool.*—vol. vii., p. 21, pl. 3, fig. 1. •

Was found in company with the preceding, but less numerous; it extends its range to the highest northern latitudes, having been found at Spitzbergen, Melville Island, Kamschatka, and in almost every part of the Arctic Seas that has been visited by the late Expeditions of Discovery.

Several specimens were obtained by us near Felix Harbour, all of which belong to the first variety of this species, noticed by Otho Fabricius, *loc. cit.*, and may eventually prove to be a distinct species, although the descriptions of authors and figures quoted may equally apply to both varieties, except in the size, and in the absence of the two cirrhi in the upper lip, which are wanting in the individual under consideration.

The average length of our variety, from the tip of the snout to the insertion of the tail, is somewhat more than three inches, whilst that of the larger variety, mentioned by Fabricius, is often a foot, and by other authors said to attain sixteen to eighteen inches.

The sucking apparatus consists of thirteen tubercles, arranged in a circular form, about one-third of an inch in diameter, and placed exactly between the snout and the vent.

3.—OPHIDIUM PARRII.

- OPHIDIUM PARRII.—*Ross, App. to Parry's 3d Voyage*—p. 109.
Ross, App. to Parry's Polar Voyage—p. 199.

This species, which was discovered several years ago in Prince Regent's Inlet, during Sir Edward Parry's third voyage to the Arctic Seas, belongs to

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6.—GADUS CALLARIAS.

GADUS CALLARIAS.—*Lacepède, Hist. Nat. des Poissons*—vol. ii., p. 409.

Cuv : Règ. Anim.—vol. ii., p. 332.

Fab : Faun. Græul.—p. 144.

Il-lit-toke.—Esquimaux of Boothia.

This species of codfish is found abundantly in the Baltic, the White Sea, and along the whole of the continental coast line of the north of Europe. Fabricius describes it as being very numerous in many parts of Greenland; and our having found it on the north coast of the American continent, along the shores of the inlet to the west of the peninsula of Boothia, is an interesting feature in its history. At the same time, the fact that the only four species of fish which were found by us in that inlet, being also common to Davis's Strait and Baffin's Bay, may be considered an additional proof (if any be still wanting) of a water communication between these two seas. It is also worthy of remark, that only two of these four species inhabit the sea on the east side of the isthmus of Boothia.

From the middle of May until near the end of June the seal-fishery is very unproductive, and attended with great labour and difficulty; the salmon do not arrive until the rivers begin to pour their waters into the sea; and during the interval, the Esquimaux assemble along the shores of that inlet, and procure a sure and abundant supply of this fish. At that period of the year it is in very poor condition, and nothing but absolute necessity could induce the natives to seek a kind of food which they dislike so much. Our party had been on very short allowance of provisions previous to meeting the Esquimaux who were engaged in its capture, and this providential supply of provisions was of essential benefit to us, and we all thought it excellent food.

It is not improbable that the three specimens of a species of *Merlangus*? mentioned by Captain Sabine,* as having been found frozen in the ice that covered Winter Harbour, in Melville Island, belongs to this species, although from the mutilated state of the specimens, he was unable to determine their identity. The number of fin rays given by him agree very nearly with the average of a number examined by me. It seldom much

* Supp. to Parry's 1st Voyage—p. ccxii.

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exceeds fourteen inches in length, but some specimens were obtained nearly a foot and a half long, from which the following dimensions are given :

Length from the tip of the snout to the end of the tail	17.3 inches
of the head to the posterior part of the gill covers	4.5
of the tail (centre rays)	1.2
from the tip of the snout to the vent	8.6

Fin Rays: B 7. P 19. V 6. A 22, 22. D 12, 19, 23. C 40 to 44.

Alimentary canal, fourteen inches. Cæcal appendages forty-two, varying from an inch and a half to half an inch in length. Cirrus on the lower jaw 0.7 of an inch long.

7.—MERLANGUS POLARIS.

MERLANGUS POLARIS.—*Sab: Supp. to Parry's 1st Voyage*—p. ccxi.

Ross, App. to Parry's Polar Voyage—p. 199.

This little fish inhabits the northern seas as far as we have hitherto been able to penetrate towards the pole; having been found in lat. $82\frac{1}{2}^{\circ}$ N, swimming near the surface of the sea, amongst the broken fragments of ice, and affording to the gulls and other seafowl their chief source of subsistence.

During our late voyage we found them wherever we went; great numbers were taken by us from between the cracks in the ice, which covered the harbour of Batty Bay, in July, 1833, and contributed greatly to support the strength of our party, when on a very small allowance of provisions.

At that period of the year it is much infested with the *Lernæa gadina*, which attaches itself to the gills of the fish.

It does not quit the Arctic Seas during the winter, several having been taken in a net at Felix Harbour during that season.

It seldom exceeds ten inches in length.

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8.—BLENNIUS POLARIS.

BLENNIUS POLARIS.—*Sab: Supp. to Parry's 1st Voyage*—p. ccxii.

Ross, App. to Parry's Polar Voyage—p. 200.

B. imberbis, pinnis anali, caudali, dorsalique, unitis. (Sabine.)

Like the *Merlangus Polaris*, it well deserves the specific name bestowed on it by Captain Sabine, from its having been found in the highest northern latitudes. It is, however, by no means numerous, and only one specimen was obtained during our late voyage; it was taken from the stomach of a *Gadus Callarias*, that was caught in the inlet on the west side of the peninsula of Boothia, and agreed, so far as its mutilated state would admit of comparison, with Captain Sabine's description, *loc. cit.*

9.—COTTUS QUADRICORNIS.

COTTUS QUADRICORNIS.—*Lacepède, Hist. Nat. des Poissons*—vol. iii., p. 241.

Sub: Supp. to Parry's 1st Voyage—p. ccxiii.

Ross, App. to Parry's 3d Voyage—p. 111.

Bloch, Ich.—vol. iii., p. 146, pl. 108.

COTTUS SCORPOIDES.—*Fab: Faun. Grænl.*—p. 157.

Kan-ny-yoke.—Esquimaux of Boothia.

Is abundant along the west coast of Greenland, but is more rarely met with in the higher northern latitudes. Two or three individuals were taken in a net in Felix Harbour, and several were captured by the natives on the west side of the peninsula of Boothia, differing in no respect from the excellent description and plate in the Ichthyology of Bloch.

Fabricius observes of the *Cottus Scorpius*, that although in daily use, it is the favourite food of the Greenlanders, and is considered wholesome for the sick; and of the *Cottus Scorpoides*, that it is less savoury; the natives of Boothia, however, prize it very highly, preferring it to the codfish or salmon.

It is also worthy of remark, that the Esquimaux of Boothia apply the same name to this fish that the Greenlanders do to the *C. Scorpius* of Fabricius.

10.—COTTUS POLARIS.

COTTUS POLARIS.—*Sab : Supp. to Parry's 1st Voyage*—p. cxxiii.

C. imberbis, capite spinis duabus, operculis spinis quatuor, armatis. (Sabine.)

This species of Cottus was found abundantly in pools of water, left by the falling of the tide, near the mouths of rivers, or streams of fresh water, on the east side of the isthmus of Boothia, and particularly so along the low shores of Sheriff Harbour. Those examined by me agreed very nearly with Captain Sabine's description, excepting, only, some slight difference in the number of the fin rays, which from the average of a great many noted by me, but varying considerably with each other, I found to be as follows :

P 15. V 5. A 15. D 8, 13. C 12 to 14.

It seldom exceeds two inches in length, and from its numbers, affords a supply of food to the gulls, ducks, and other waterfowl that resort to those regions to breed.

11.—PLEURONECTES HIPPOGLOSSUS.

PLEURONECTES HIPPOGLOSSUS.—*Lacépède, Hist. Nat. des Poissons*—vol. iv., p. 601.

Cuv : Règ. Anim.—vol. ii., p. 340.

Fab : Faun. Grænl.—p. 161.

PLEURONECTE FLÉTAN.—*Bloch, Ich.*—pl. 47.

HALIBUT.—*Penn. Brit. Zool.*—vol. iii., p. 184.

The common Halibut of our shores is found abundantly near the west coast of Greenland, but it seldom attains to a very great size. The largest seen by O. Fabricius did not much exceed four feet in length: those taken by us varied in this from thirty-eight to forty-four inches; and in weight from twenty-two

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to forty-one pounds. According to Lacepède, it has been captured near the coasts of Iceland and Norway, of a most enormous magnitude, rivalling in size some of the smaller species of the whale kind; and Pennant, who had himself seen one that weighed three hundred pounds, says, that much larger ones are frequently taken near Iceland. The following dimensions are the average of ten, that we took off the west coast of Greenland, in July, 1829, from the same bank as the *Gadus Morhua* of this notice.

Length from the tip of the snout to the end of the tail	. 43.1 inches
of the head to the posterior part of the gill covers	10.7
of the tail (centre ray)	. . . . . 6.0
of the rays of the anal and dorsal fins	. . . . . 4.3
Breadth of the tail	. . . . . 13.3
of the body	. . . . . 21.1
Average weight, 34½ lb.	

Number of fin rays: B 7. P ½. V 6. D 99. A 77. C 17.

SALMONES,

BY JOHN RICHARDSON, M.D., F.R.S., &c.

The following notices of four specimens of *trout*, brought from Boothia Felix by CAPTAIN JAMES CLARK ROSS, are drawn up in very general terms, that they may not occupy more space than that assigned to the other objects of Natural History, described in the Appendix ; but figures, with the characters of the species in minute detail, will be given in the third volume of the "Fauna Boreali Americana," now preparing for publication.

The first species is, as far as we know, peculiar to the inlet in which it was found. It would have been highly interesting to have detected the same species of salmon in Coronation Gulf and Regent's Inlet, but the *Salmo Hearnii* and *Mackenzii*, and several species of *Coregonus*, found in the former, were not seen in the latter ; neither have the *S. salar*, or common salmon, which frequents the rivers from Labrador to the forty-second parallel of latitude, nor an undescribed species, resembling the *Gorbuscha* of Kamtschatka, which abounds in New Caledonia, been hitherto detected in the American Polar Seas ; nor does the *S. namaycush* (Pennant), a gigantic trout, which exists abundantly in all the great American lakes, appear to have been observed in the waters of Boothia Felix. The last species, however, that is mentioned in the following notices, is common in all parts of the fur countries ; and it is probable that *S. alipes* and *nitidus* have also an extensive range, though want of more southern specimens have prevented us from ascertaining the fact.

SALMO ROSSII (*Ross's Arctic Salmon*).

ICON.—*Faun. Bor. Amer.*—pl. 80, and the head pl. 85, fig. 2.

This salmon, named *Eekalook* by the Esquimaux, was found in vast numbers* in the sea near the mouths of rivers, and furnished an agreeable article of diet to the members of the Expedition. It is quite distinct from any species that we have had an opportunity of seeing in other parts of America, and it does not agree with the character of any of those described in the History of Kamtschatka, as quoted in "Arctic Zoology," except perhaps with the *Salmo malma* (Steller) or *Golet* of the Russians, which corresponds with it in its comparatively slender cylindrical form, small scales, scarlet spots on the sides, and the colours of some other parts. But the *Golet*, instead of being found only in the sea, ascends rivers to their very sources, and does not congregate in shoals like the *Salmo Rossii*. None of the Scandinavian salmon described by Nilsson have any resemblance to *S. Rossii*.

The most remarkable peculiarities of this species, are the truncated form of the upper jaw; the length of the lower one, which considerably exceeds the distance between the tip of the snout and nape of the neck; and the smallness and form of its scales. These are imbedded in a mucous skin, which entirely covers them, except their small truncated tips, that project and feel very rough to the touch in the dried specimen. The scales are rather remote, being nowhere tiled. The teeth in the jaws are remarkably obtuse. In addition to the row on each side of the tongue, which exists in all the other *Truttae*, there are two or more rows of smaller teeth, crowded across the tip of that organ. Two drawings by Captain Ross, with the inspection of the dried skin, enable us to describe the colours as follows: Back, top of the head, dorsal and caudal fins intermediate between oil-green and hair-brown; sides pearl-grey and silvery, with a blush of lilac, marked near the lateral line with scattered round dots of carmine. The belly varies from tile-red to arterial blood-red; the sides of the head are nacre. When the fish is out of season, the colour of the lower parts fades to a

* Some idea may be formed of the amazing numbers in which the *Salmo Rossii* visit the rivers of Boothia Felix, by mentioning that from a single haul of a small-sized seine net, we landed 3378 salmon, varying in weight from two to fourteen pounds, and averaging something more than four; the whole rather exceeded six tons weight. A great many more were enclosed in the net, but escaped through some holes that were for some time unobserved, and others by leaping over it.—J. C. Ross.

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dusky-orange. The flesh is reddish, of different tints in different individuals, being best flavoured when the colour is most intense.

The length of the specimen which was brought home is thirty-four inches, of which the head forms one-fifth.

The following are the numbers of the rays of the fins :

Br. 12, 13. D 13—0. P 14. V 10. A 11. C 21 $\frac{1}{2}$.

SALMO ALIPES (*Long-finned Char*).

ICON.—*Faun. Bor. Amer.*—pl. 81, and the head pl. 86, fig. 1.

This species, which with several other kinds, is included by the Esquimaux under the general appellation of *Eekalook-peedeook*, was found in a small lake, whose waters were discharged into the sea by a rivulet about half a mile long. The smallness of its scales, and the vomerine teeth being confined to the anterior knob, characterize it as belonging to the subdivision *Salvelini* or Chars of Nilsson. Its form is slender, its jaws are of nearly equal length, and it differs from all its congeners, that we have seen, in the great comparative length of its fins. The scales are small and crowded, but not tiled ; they are covered with a thin epidermis, and do not exhibit the projecting naked tips, which give so peculiar a character to the skin of *Salmo Rossii*. Even in the dried specimen they are perfectly smooth to the touch. No description of the colours of this species was furnished to us, but as far as can be judged from the tints remaining in the prepared skin, the upper parts were hair-brown, the sides paler, with yellowish spots, and the belly white or yellow ; the under fins more or less deeply orange.

The length of the specimen is twenty-four inches, of which the head measures one-fifth.

Fins: Br. 11, 12. P 15. D 13—0. V 9. A 10 or 11. C 19 $\frac{1}{2}$.

SALMO NITIDUS (*The Angmalook*).

ICON.—*Faun. Bor. Amer.*—pl. 82, fig. 1, and head pl. 86, fig. 2.

This fish, which is also to be ranked among the Chars, was found in the same lake with the preceding one, to which it bears much resemblance in the form of the parts of

the head, and in the size and general character of the scales; it differs from it, however, in having a thicker body, a ventricose belly, and short fins. Its upper jaw, too, is comparatively shorter, the distance from the tip of the snout to the extremity of the labials, when applied to the top of the head, falling about an inch short of the nape instead of reaching to it as in the preceding species. Its colours are described as follows by Captain J. C. Ross: "The body above the lateral line is of a deep green, softening towards the belly, which, posteriorly to the pectorals, is of a beautiful yellowish-red. There are several rows of ocellate red spots, confined chiefly to the space between the lateral line and the yellowish-red of the belly, and varying in size, the largest being as big as a pea. The dorsal fins are of the colour of the back. The pectorals, ventrals, and anals, are dusky-red, their first rays white."

The length of the specimen is twenty inches, of which the head forms more than one-fifth.

Fins: Br. 11, 12. P 17. D 14—0. V 10. A 12. C 21½.

SALMO HOODII (*The Masamacush*).

ICON.—*Faun. Bor. Amer.*—pl. 82, fig. 2, pl. 83, fig. 2, and head pl. 87, fig.

This Char is well known throughout the fur countries, being found in every river and lake. Its Cree name is *Masûw-mæcoos*. It resembles the two preceding Chars in its scales, but differs from them in the shortness of its jaws, and from the rest of the genus in the peculiar smallness of its head, which forms only one-sixth of the total length. Plate 82, fig. 2, above quoted, is copied from a drawing made from a recent specimen taken at Cumberland House, on the Saskatchewan, lat. 54°, by the lamented officer whose name it bears; while plate 83, fig. 2, is from the dried skin brought home by Captain J. C. Ross. An individual killed at Fort Enterprise, in March, 1821, exhibited the following colours: Back and sides intermediate between olive-green and clove-brown, bestudded with moderately large roundish spots of yellowish-grey, the colour becoming more dilute as it descends on the sides; the belly and under jaw are white, and there are a few bluish-grey dots in the latter: there are also some small and regular dots on the caudal and dorsal fins; irides honey-yellow, scales having merely a moderate degree of lustre; there is a row of teeth across the tip of the tongue, and a few scattered ones on its centre, as well as the usual row on each side.

The length of the specimen from Boothia Felix is twenty-one inches.

Fins: Br. 10, 11. P 15. D 12—0. V 10. A 11. C 19½.

INSECTS.

DESCRIPTIONS, &c.

OF THE

INSECTS BROUGHT HOME BY COMMANDER JAMES CLARK

ROSS, R.N., F.R.S., &c.

BY JOHN CURTIS, ESQ., F.L.S., &c.

However delighted the naturalist may be with the productions of his native soil, he cannot fail to take a deep interest in objects that are transported from distant regions, possessing, as they do, the charms of novelty, and frequently presenting to him new types of form, or at least species, that he has never before had the opportunity of investigating.

The little collection of Insects lately brought from the Arctic Regions by Commander Ross, is consequently highly interesting, and the observations interspersed through the following pages, from his notes, contain data and information that are very important to the entomologist.

I may here briefly observe, that all the forms in the collection of Insects are strictly European, and the greatest variety, as well as number, was found amongst the Lepidoptera, but this might arise from the insects of that order being larger and more conspicuous, and consequently more likely to attract the attention, than smaller and sometimes almost inanimate objects. I think it very probable, however, that the Coleoptera are less abundant in the Polar Regions than the Hymenoptera, Lepidoptera, and Diptera.

ORDER COLEOPTERA.

FAM.—DYTISCIDÆ.

GEN. 95.*—COLYMBETES. (*Clairv.*)

1. *Mæstus*, narrow, ovate, somewhat piceous, legs castaneous, female very finely shagreened.

Length three lines, breadth one line and a half.

Antennæ yellowish-brown, ochreous at the base, trophi ochreous, palpi black at the apex; head with two ferruginous spots at the base, and an impressed line and puncture on each side the base of the clypeus; thorax with an impressed punctured line all round, deepest at the anterior margin, and a large puncture on each side; elytra very long, slightly convex, piceous and shining, with a violaceous tint in the male, dull greenish and finely shagreened in the female; the lateral margins obscure ochre, a few punctures are scattered over them, forming two or three indistinct lines; legs castaneous, underside of thighs and posterior tibiæ piceous.

This is the only beetle contained in the collection, and was found in the lakes not uncommonly; I believe specimens are also in the cabinets of the Zoological Society, that were brought home by the late Captain Lyon.

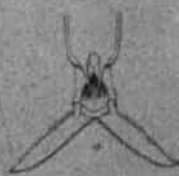
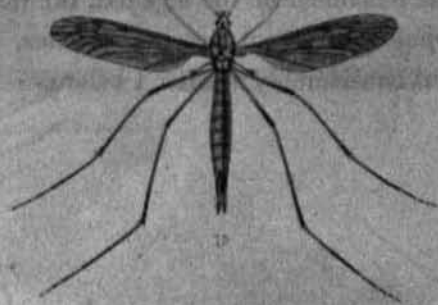
Two large beetles were captured on the 23d of June, 1831, and another on the 14th of July; they were found under stones, but were obliged to be abandoned with other valuable portions of the collections in Natural History.

ORDER DERMAPTERA.

GEN. 442.—FORFICULA. (*Linn.*)

An earwig was taken on the 23d of June, 1831, "they were scarce," Commander Ross adds, "but several were found under stones."

The numbers of the genera refer to Curtis's Guide to an Arrangement of British Insects.



ORDER HYMENOPTERA.

FAM.—ICHNEUMONIDÆ.

GEN. 484.—ICHNEUMON. (*Linn.*)

2. *Lariæ*. Antennæ curled ; rufous, tips of antennæ, head, underside of the trunk, with the coxæ, and a spot and a broad stripe on the abdomen black.

Plate A, fig. 1.

Length five lines, breadth ten lines.

Clothed with very short brownish pubescence, pale castaneous, minutely punctured ; antennæ and head black, the former filiform, the basal joint rufous, third and four following joints paler red ; trunk black, the upper surface of the mesothorax and scutellum rufous and shining, metathorax dull and darker above, with a black furcate stripe down the back ; abdomen ovate, very thickly punctured, a black dot at the base of the second segment, the third with a broad black stripe down the middle, concave on each side, the remainder black with a rufous spot on each side at the base of the fourth segment, petiole rather short, narrowed at the base ; wings tinged with yellowish fuscous, nervures and stigma ferruginous ochre, areolet quinquangular ; legs rather stout, coxæ and trochanters black, the former with a red spot on the upper side in the hinder pair.

This Ichneumon infested the larvæ of the *Laria Rossii*, from which it was bred early in July, another was taken on the 8th of the same month, but they were not very numerous.

GEN. 516.—EPHIALTES. (*Grav.*)

A fragment only of a female was preserved, but from the existence of the specimen it might be inferred that fir trees or stumps were in the neighbourhood. The metathorax, abdomen, sheaths of the oviduct, and posterior coxæ and trochanters are black, the remainder of the legs red, the tarsi dusky at the apex ; oviduct ochreous ; inferior wings transparent, nervures piceous. It is similar in form to *E. Carbonarius* (*Christ.*), but considerably smaller I believe.

GEN. 529.—CAMPOPLEX? (*Grav.*)

3. *Arcticus*. Black, legs fulvous.

Length four lines, breadth seven lines and a half.

Black and pubescent; antennæ as long as the insect, subsetaceous and not very slender; head and thorax thickly but minutely punctured, the former short, the latter subglobose, abdomen shining, clavate, and slightly compressed at the apex, peduncle rather short; wings transparent, areolet very small, subtrigonal, with the base angulated, and the nervures uniting at the apex before they reach the marginal cell; nervures and stigma piceous, the latter narrow; legs fulvous, coxæ, trochanters, and tips of tarsi black; the spurs to the four posterior tibiæ rather long and slender.

GEN. 554.—MICROGASTER. (*Lat.*)

4. *Unicolor*. Black, wings nearly colourless.

Length one line one-third, breadth three lines.

Black, thickly and minutely punctured, base of the tibiæ dirty ochre, spurs at the apex brighter; wings transparent but stained with black, nervures and stigma ochreous brown, areolet imperfect.*

A male was bred from a cluster of cocoons, enveloped in a silky ball, resembling those containing the eggs of some spiders.

FAM.—FORMICIDÆ.

GEN. 661.—MYRMICA. (*Lat.*)

Rubra. (Linn.)

In great numbers under stones."

FAM.—APIDÆ.

GEN. 723.—BOMBUS. (*Lat.*)

6. *Kirbiellus*. Black, anterior and posterior margins of the thorax and base and apex of abdomen clothed with yellowish hairs.

* Vide Curtis's British Entomology—vol. vii., folio and plate 321.

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<i>Male</i>	7½ lines long, 16 lines broad
<i>Female</i>	10 . . . 20
<i>Neuter</i>	7 . . . 13

Male. Black, antennæ as long as the thorax, compressed at the apex; face and crown of head clothed with long yellow and black hairs; thorax yellow with hairs, having a transverse black band between the wings, basal half of abdomen yellow, the remainder orange, with a narrow black band across the middle; wings slightly yellow at the costa, the posterior margin slightly stained with brown, nervures piceous; basal joint of tarsi clothed inside with bright ferruginous hairs; spurs, base of claws, and apex of tarsi ochreous.

Female, pl. A, fig. 2.

Black, a broad margin in front of the thorax, hinder margin of scutellum, and the abdomen, excepting the third segment and the apex, clothed with long yellow-ochreous hairs; wings yellowish, excepting the posterior margin, the nervures piceous; inside of the tarsi with the pile bright ferruginous; tips of spurs, apical joint of tarsi, and base of claws subcastaneous.

Neuter. Similar to the female but much smaller, the hairs beyond the black band on the abdomen are generally orange, and the whole of the tarsi, excepting the basal joint, is subcastaneous.

I have named this bee, which seemed to be the most abundant species, after my esteemed friend the Reverend William Kirby.

7. *Polaris.* Black, clothed with yellow hairs above, with a black band across the thorax, and an indistinct one across the abdomen.

<i>Male</i>	6 lines long, 15 lines broad
<i>Female</i>	10 . . . 20

Male. Black, clothed with yellow hairs; head black, with a patch of yellow hairs on the face, and another on the back part of the head, a blackish band across the centre of the thorax, and an indistinct narrow one on the third and fourth segments of the abdomen, the apex orange; inside of tarsi clothed with yellowish pile.

Female. Black, a broad band across the anterior portion of the thorax, the scutellum, and abdomen clothed with long yellow hairs, whitish towards the apex of the abdomen, with a few black hairs on the sides of the third segment, a band of the same colour on the fourth, and a very slight one on the fifth segment; the tarsi clothed with black pile internally, the outside of the basal joints brownish, the edges ferruginous.

A pair only of this species was preserved, in size and many respects it resembles *B. Kirbiellus*, but the indistinct and somewhat double band of black hairs across the abdomen will distinguish it, and the yellow pile inside of the tarsi in the male and the black in the female, are sufficient characters I think to justify its being separated from the former species.

8. *Arcticus*. (Kirby in the Supplement to the Appendix of Captain Parry's 1st Voyage, p. ccxvi.)

An imperfect male was the only specimen brought home of the species.

As Commander Ross's observations embrace the above three species, I shall be under the necessity of embodying them; but that is of little importance, as their habits must be very similar.

"The largest bee seems to be the earliest insect on the wing; it is generally seen early in June, but the smaller specimens do not appear until the middle or end of July." It may be observed that the females are the largest, and the next in size the males; these make their appearance first, and the neuters, or working class, come later, when more flowers probably are out, and their labours are less interrupted by unsettled weather.

"The first female was seen on the 7th of June, 1830, they were very abundant on the 2d of July, and on the 14th a neuter was taken; on the following day they were very numerous, and the females less abundant, but a few were observed as late as the 18th of August, soon after which time they seem in a very weak state."

"In 1831 the first bee was seen on the 19th of June, on the 26th two females, and on the 8th of July several were captured; on the 14th many females, on the succeeding day some neuters, and on the 27th of August, 1832, a large bee was seen."

ORDER TRICHOPTERA.

FAM.—PHRYGANIDÆ.

Gen. 760.—TINODES? (Leach.)

9. *Hirtipes*. Slate colour, wings pale fuscous.

Length two lines and a half, breadth nine lines.

Pale slate colour, sparingly clothed with long whitish hairs; head small; eyes

minent, as well as two ocelli; wings pale ochreous fuscous, pubescent and glossy, superior elongated and narrow, gradually narrowed to the base; cilia short; inferior wings iridescent; tibiae and tarsi dull ochreous, with numerous short black bristles inside, and especially beneath the latter; the four posterior tibiae furnished with ochreous spurs at the apex.

This insect has the habit of a *Tinodes*, but the neuration of the wings does not quite agree with any in my possession, and it has but one pair of spurs to the posterior tibiae; if, therefore, the antennae were not wanting, I should be disposed to give it a generic name.

ORDER LEPIDOPTERA.

FAM.—PAPILIONIDÆ.

GEN. 767.—COLIAS. (*Fab.*)

10. *Boothii*. Yellow, posterior margins blackish, cilia rosy; a black spot on the superior wings, the disc orange, and a spot of the same colour on the inferior.

Expansion of wings two inches.

Pl. A, fig. 3 ♂, 4 ♀, 5 underside of ♀.

Male. Antennae crimson, the club beneath ochreous, above brown: thorax and abdomen black, clothed with long whitish hairs, rosy on the collar and head; wings sulphur colour, freckled with black at the base, and at the posterior margins forming a dentated fimbria, which vanishes before reaching the anal angle; costa and cilia rosy, the nervures sometimes rather dark in the superior wings, with a large space of orange not approaching the costa or posterior margin; at the apex of the discoidal cell is a black sublunulate spot; inferior wings with a large orange spot on the disc, and sometimes a small one above it; *underside* thickly freckled with black, especially the inferior wings, but less so at the posterior margins; the entire edges of the wings are rosy; superior with a whitish dot on the black spot, which is variously formed; inferior with a large and small whitish spot on the disc, surrounded with reddish-chestnut colour, forming two tails towards the posterior margin, a spot of the same colour at the base, and frequently a lunate brown spot on the upper edge; legs rosy.

Female. Similar to the male, but the black freckled fimbria to the wings is broader

and ornamented with seven large yellow spots in the superior, and six in the inferior, which are, excepting these spots, entirely freckled with black, and have a greenish tinge; the *underside* is darker and brighter than in the male, the inferior wings and the freckled parts of the superior are green, parallel to the posterior margin is a line of sub-trigonal spots, very distinct and black in the superior, and reddish-brown in the inferior wings.

A small specimen of the male, I observe, has indistinct yellow spots on the fimbria of the superior wings, and the castaneous comet-shaped spots on the underside of the inferior are very small, and in one female the black spot in the upper, and the orange spots in the inferior wings are very large, and in another female the upperside very much resembles the male.

At the request of Commander Ross, I have named this handsome insect after Felix Booth, Esq., the munificent patron of the Expedition.

11. *Chione*. *Male*, yellow, superior wings orange on the disc, with an orange spot near the centre of all the wings. *Female?* with the nervures and a spot near the disc black, with a broad black fimbria spotted yellow.

Expansion one inch eight lines to one inch ten lines.

Pl. A, fig. 6, ♂.

Male similar to *C. Boothii*, but the spot at the apex of the discoidal cell is orange, and the posterior margins of the wings are very slightly freckled with black; the underside in some examples resembles the female rather than the male of the same species.

Female, greenish sulphur, superior wings slightly orange on the disc, with the nervures and a lunulate spot black, a broad black fimbria bearing six or seven small sulphureous spots; inferior with a similar fimbria, but less perfect, and an orange spot on the disc; *underside* pale greenish sulphur, similar to *C. Boothii*, but having only one comet-shaped spot on the under wings.

Knowing how variable some species of the genus *Colias* are,* I have great doubts if this be any more than a variety of *C. Boothii*. There are other specimens, which I believe are varieties of the female occasioned by age and other circumstances, being much paler, with the black of the nervures very much suffused, so much so in one specimen, as to render nearly the whole of the superior wings of the same colour as the fimbria.

“ These butterflies generally appear about the middle of July, as well as the two

I need only instance *P. Electra* Linn. (*C. Edusa* Fab.), which is of a deep orange colour, yet the female is sometimes met with of a pale yellow, and during my visit to the south of France, I took one of these females paired with a male ♂ of the usual orange colour

following species, they are chiefly found upon the *Oxytropis Campestris* and *O. Arctica*, two papilionaceous plants; they were captured from the 14th of July to the 13th of August, 1830, and on the 19th were in a very wasted state; on the 14th of July, of the following year, one *Colias* only was taken."

GEN. 770.—HIPPARCHIA. (Fab.)

12. *Rossii*. Brownish-black, antennæ ochreous, superior wings with two rufous spots, with a black centre; having a white pupil also on the underside.

Expansion of wings two inches.

Pl. A, fig. 7, underside of male.

Male blackish; palpi rather long and very hairy; antennæ slender and ochreous, the club elongated; wings rounded, blackish-brown, with a slight bloom of violet, superior with two red spots towards the apex, with a black pupil, the superior one the smaller, cilia dull ochre, indistinctly spotted with brown; underside with the disc of the superior wings chestnut colour, and two red spots towards the apex, each having a white pupil and black ocellus; inferior freckled and variegated with ochre, forming several spots towards the base, and an indistinct band beyond the centre, on the external edge of which are four ochreous dots; inside of four posterior legs pale ochreous.

Female blackish, with an ochreous shade, the rufous spots towards the apex paler, with the black pupil more or less distinct, and one or two smaller rufous spots between them and the posterior angle; the antennæ are dotted with black on the upper side, and the club is dark above and very much compressed; underside with the superior wings more rust-coloured, and the two spots ochreous; the spots and fascia on the inferior wings more distinct, the margins of the latter, especially the hinder one, dentated.

This very distinct Papilio, I have the pleasure of dedicating to my friend Commander James Clark Ross, F. R. S., &c., whose zeal for natural history is equalled only by that enterprise and energy which have characterized all his undertakings, and carried him so successfully through his various voyages to the Arctic Regions.

Five specimens only were brought home, "they were scarce, and frequented the precipitous faces of dark-coloured rocks and loose stones. I never found," says Commander Ross, "any of them on flowers of any kind. A few specimens were obtained on the 18th and 25th of July, 1830, and one on the 14th of the same month the year following."

13. *Subhyalina*. Wings semitransparent, fuscous, costa freckled with black and white, two small black spots towards the apex with white pupils, most distinct on the underside.

Expansion one inch eleven lines.

Male black, antennæ ochreous, the club elongated; wings semitransparent, pale fuscous, nervures ochreous, costa black, freckled with white; two indistinct white dots towards the apex with blackish ocelli, cilia whitish, spotted with black; *underside* of superior wings similar to the upper, but the ocellated spots are distinct, and the surface, excepting the disc, is mottled with ochre and pale black, brightest at the apex; inferior wings spotted and mottled with black and dirty white, forming a waved and curved pale line beyond the middle, with three or four whitish dots beyond it.

A single male was preserved, and probably was taken with the last species, of which, at first sight, I thought it had been only an old and faded specimen, but on examination it proved to be in good condition.

GEN. 775.—MELITÆA. (*Fab.*)

14. *Tarquinius*. Wings tawny, spotted with black, inferior wings beneath with several pearly spots edged with black, an irregular pearly line beyond the middle, and seven spots of the same on the margin.

Expansion from one inch six lines to one inch ten lines.

Black, antennæ with a large spoon-shaped club, the tip and underside tawny; palpi somewhat ochreous beneath, freckled with scarlet outside; wings tawny orange, black at the base, superior with three long black spots on the discoidal cell, and a waved line across the middle formed of black crescents, beyond is a row of six black spots, and close to the posterior margin a line of Δ 's, alternating with the same number of spots, which variegate the white cilia; inferior similarly marked; *underside*, superior wings paler, sometimes ochreous at the tip, variegated with ferruginous, the spots from the upper side apparent, but smaller and fainter; inferior wings reddish-brown, a little variegated with ochre, with three pearly spots at the base, a v shaped one, and two larger elongate-trigonal spots, margined with black beyond them, across the middle is a row of black Δ 's, with an irregular line of pearly crescents, with six small black spots beyond it, and seven pearly spots on the margin, edged internally with black Δ 's, the superior margin is also pearly, the cilia pale ochreous spotted with black: ~~legs~~ *legs* dull ochreous, thighs scarlet on the upperside.

As this insect does not agree with the *P. Tullia* of O. Fabricius, and I have reason

to believe that several species have been detected in the Polar Regions, I have carefully described it and given it a name.

M. Tarquinius was an abundant species, and like the *Coliades* was found feeding on the flowers of *Oxytropis Campestris* and *O. Arctica*; specimens were captured on the 10th of June, and between the 2d and 14th of July, 1830, they were most abundant; in 1831 the first butterfly seen was one of this species; this was the 10th of July, and on the 14th two more were taken. Commander Ross was so fortunate as to discover the caterpillar apparently of this species, from its structure resembling those larvæ that are known of the European *Melitææ*. "I do not know the caterpillar of any of the butterflies, unless it be that of the *Melitææ*, of which I made the following description. It measured exactly an inch in length, by 0.22 of an inch, it was composed of thirteen segments besides the hindmost one; the first and last segments with two, the second and twelfth segments with four, and all the other segments of the body with six prickles or horns, and disposed in rows and equidistant on each side of the back. Colour dark brown, with a line of white spots along each side. Some caterpillars I have seen entirely of a blackish-brown, or rather brownish-black; one that was found under a stone in the middle of March, and of course perfectly hard frozen, showed symptoms of life in half an hour after being brought into the cabin, and in less than an hour it was walking about the table. It is thus described in my note book, and differs so much from the others, that it probably belongs to another species. Length 0.75 of an inch; three rows of prickles on each side of the back; twelve ribs or segments and a white dorsal line along the back; colour above brownish-black, beneath clove-brown." It possibly may be the same caterpillar in an earlier stage, as the different skins vary considerably.

GEN. 779.—POLYOMMATUS. (Lat.)

15. *Franklinii*. Silvery grey, with a black ocellated dot on the centre of each wing, beneath brown, with numerous white spots, those on the upper wing with large black pupils, in the under wings with only small ones or none.

Expansion from eleven to thirteen lines.

Pl. A., figs. 8 and 9.

Black with bluish hairs, palpi bluish white, margins of eyes silvery white; antennæ dotted with white, club orange, excepting the back; wings greyish powdered with silvery green, especially at the base, the spots on the underside slightly visible, a black spot on the disc on each wing with a whitish margin; the edges of the wings fuscous,

the posterior with a line of indistinct whitish ocelli along the margin; cilia white; underside, superior wings with a white spot towards the base, and another on the disc with a long black pupil, beyond them is a curved line of six black spots ocellated with white, and near the posterior margin the same number of indistinct kidney-shaped blackish spots margined with white; inferior wings fuscous freckled with gold, but blue at the base, five whitish spots towards the base, the three outer ones with black pupils, four similar ones in a line beyond the middle, touching a row of eight whitish lunules bearing blackish spots, two towards the centre being the largest, and sometimes crescent-shaped; legs bluish-white.

I have named this pretty species after Sir John Franklin, whose overland expeditions in the Northern Regions have so greatly contributed to our knowledge of the geography and natural history of that part of the world.

"Only two individuals of this species were taken; they were feeding on *Astragalus Alpinus* near the end of July."

FAM.—BOMBYCIDÆ, OR ARCTIIDÆ.

GEN. 814.—LARIA. (Schr.)

16. *Rossii*. Transparent grey, superior wings with two blackish waved lines forming a fascia across the middle, with a spot between them, and a similar sinuated line beyond them; inferior wings cream colour, ochreous inside with a blackish fimbria.

Expansion of male one inch eight lines, female one inch ten lines.

Pl. A, fig. 10.

Male yellowish-grey, a spot on each shoulder, and the abdomen darker; superior wings semitransparent, the costa blackish interrupted with grey, a waved blackish line before and another beyond the middle, with a crescent-shaped spot at the extremity of the discoidal cell, and a very sinuated and dentated line near to the posterior margin; cilia blackish, spotted with ochre; inferior wings cream colour, the abdominal margin ochreous, as well as the cilia, with a blackish fimbria.

Female apparently paler, but very much injured.

I have named this very distinct moth after Captain Ross, who first penetrated these inhospitable regions, and to whom we are indebted for many additions to our zoological collections.

It is a very abundant insect, especially in the caterpillar state, for about a hundred

were collected on the 16th of June, 1832, near Fury Beach; the first that was seen in the previous year was on the 19th of June, and several more on the 23d. The caterpillar is large and hairy, of a beautiful shining velvety black, the hairs being somewhat ochreous, there are two tufts of black hair on the back, followed by two of orange. A great number of them are destroyed by several kinds of flies and ichneumons, one of which is represented at fig. 1; but those that arrive at maturity spin a close web, about the size of the silkworm's, and covered outside with its hairs, the pupa is piceous and shining, and the back thickly clothed with long brownish-ochre hairs its whole length; the moth appears about the beginning of August. The following interesting experiments I have transcribed from Commander Ross's MSS. "About thirty of the caterpillars were put into a box in the middle of September, and after being exposed to the severe winter temperature of the next three months, they were brought into a warm cabin, where in less than two hours, every one of them returned to life, and continued for a whole day walking about; they were again exposed to the air at a temperature of about 40° below zero, and became immediately hard frozen; in this state they remained a week, and on being brought again into the cabin, only twenty-three came to life; these were at the end of four hours put out once more into the air, and again hard frozen; after another week they were brought in, when only eleven were restored to life; a fourth time they were exposed to the winter temperature, and only two returned to life on being again brought into the cabin; these two survived the winter, and in May an imperfect *Laria* was produced from one, and six flies from the other; both of them formed cocoons, but that which produced the flies was not so perfect as the other." The caterpillar "feeds mostly on the *Saxifraga tricuspidata* and *oppositifolia*."

GEN. 820.—EYPREPIA. (Ochs.)

17. *Hyperboreus*. Castaneous brown, superior wings with a spot on the costa, and an interrupted stripe towards the hinder margin cream colour; inferior wings with an orange band across the middle, bearing a brown spot; the margin orange also.

Expansion one inch eleven lines.

Male castaneous brown, antennæ black, the rays short; the superior wings with a cream coloured spot at the middle of the costa, and a waved stripe of the same colour near the posterior margin, nearly divided in the middle; inferior wings ochreous freckled with scarlet, castaneous brown at the base, an elongated spot at the middle, and a sinuated fascia beyond it of the same colour; margin of the abdomen, upper side of

the thighs, and underside of wings vermillion, variegated with the ochre and brown of the upper surface.

On the 8th of August, this splendid moth was brought on board by one of the men, it was the only one seen, and too much injured for drawing. In a former voyage a similar insect was brought home by Captain Lyon, this may therefore be only a remarkable variety.

FAM.—NOCTUIDÆ:

GEN. 849.—HADENA.* (Schr.)

18. *Richardsoni*. Brown and pale grey, the upper wings with an ear-shaped and two other spots on the disc, and two denticulated strigæ beyond them; inferior, dirty white, the base and a fimbria fuscous.

Expansion one inch five lines.

Pl. A, fig. 11.

Male pale grey, palpi and antennæ black, the latter ciliated beneath;† head and thorax variegated with black; abdomen fuscous; superior wings brown, the costa spotted with grey and black, two grey waved strigæ near the base edged with black, with a small black oval attached to the second, above it is a small black ring united to a larger ear-shaped spot, beyond them is a curved denticulated grey striga edged inside with black, and a darker one near to the posterior margin; cilia whitish, spotted with black; inferior wings ochreous white, a lunulate spot on the disc, the base and fimbria pale black; legs spotted with black; wings beneath yellowish-white, with a fuscous lunulate spot on the disc of each, and a fimbria of the same colour.

I have named this very distinct moth after Dr. Richardson, the friend and companion of Sir John Franklin.

Two males only were brought home, they were captured on the 25th of July, 1830, and it was by no means a numerous species. It considerably resembles the *Noctua Lappo* of Godart, but is at once distinguished by the white on the under wings, and it is worthy of remark, that the only specimen I have seen of that moth was captured in Forfarshire, Scotland, and presented to me by Charles Lyell, Esq.

* For the character of this genus, see Curtis's Brit. Ent.—fol. 308.

† The tips are represented as in the specimen; they appear to be broken off.

FAM.—PHALÆNIDÆ.

GEN.—PSYCHOPHORA. (Kirby.)

Antennæ rather short and setaceous, bipectinated in the male, simple in the female; the rays very short at the base, and vanishing towards the apex; each joint producing two, which are clavate and pubescent (fig. 7a); *maxillæ* long and spiral; *palpi* porrected horizontally, short and very hairy, projecting a little beyond the head; *head* and *eyes* rather small; *thorax* subglobose and hairy; *abdomen* short subcylindric, tufted at the apex in the male with a pair of horny incurved spoon-shaped forceps; *wings*, superior subtrigonal, the apex a little angulated in the female; *legs*, posterior a little the longest; *tibiæ*, anterior short, with an internal spine, the others longer, with a pair of spurs at the apex, the posterior with a pair also below the middle; *claws* simple and distinct.

19. *Sabini*. (Kirby.) Cinereous, superior wings with an obscure dark patch at the base, and a slightly angulated fascia across the middle narrowed at the interior margin, the edges sinuated, with a dot on the disc; inferior wings paler, with two obscure transverse lines; underside whitish-cinereous, with a fuscous spot on the costa; the cilia spotted fuscous.

Expansion from one inch to one inch and two lines.

Plate A, fig. 12, male; fig. 7, the head in profile.

Mr. Kirby's description being incomplete, from his want of perfect specimens, I have endeavoured to supply the deficiency by giving the generic characters. When I published the genus *Psodos* (*Treit.**), I thought, from the observations of Mr. Kirby, that *P. trepidaria* might be allied to his genus *Psychophora*, if not synonymous, but I am now satisfied that it is considerably removed from it. It bears considerable resemblance to the genus *Thera* (*Ste*), but is most probably allied to *Zerynthia*.†

GEN. 915.—OPORABIA. (*Ste*?)

20. *Punctipes*. Cinereous, superior wings with an oblique fascia, and several pale waved strigæ; legs spotted with white.

Curtis's Brit. Ent.—vol. ix., pl. 424.

† *Ib.*—vol. vii., pl. 296.

Expansion one inch and two lines.

Antennæ blackish, setaceous, pubescent beneath; maxillæ long and spiral; palpi short, not very thickly clothed with scales; superior wings cinereous, with a darker patch at the base, a faint oblique fascia across the middle; narrowed towards the interior margin, the edges crenated, with two very waved pale lines between it and the base, and three beyond it, and a dot on the disc; cilia spotted; legs fuscous, tips of all the joints of the tarsi, of the tibiæ, and a spot on the centre of the latter, white; the middle tibiæ are spurred at the apex.

An imperfect specimen, wanting the body and under wings, was brought home.

FAM.—TORTRICIDÆ.

*GEN. 960.—ORTHOTÆNIA. (Ste.)

21. *Bentleyana*. (Don.) Ochreous brown, superior wings variegated with numerous whitish silvery spots, forming irregular lines, with a distinct round one at the centre, the costa spotted brown and white, each of the white dots bearing a brown one; inferior wings pale fuscous.

Expansion from ten to twelve lines.

Bentleyana. Don: *Brit. Ins.*—vol. x., pl. 357, fig. 1.

Pinetana. Hub: *Tort.*—pl. 10, fig. 57?

I believe several specimens were taken the 2d of July, 1830, and the 14th of the same month the following year. This is an interesting discovery, as it shows the distribution and times of appearance of a small moth. In ascending Schichallien in company with my friend Mr. Dale, on the 11th of July, 1825, we met with this insect in great abundance on the north side, near and at the top, upon the turf amongst the rocks; we found it in a subsequent year amongst heath, at an elevation of about 1000 feet, on mountains in the neighbourhood of Ambleside in the middle of June, and afterwards at Trafford, near Manchester.

22. *Septentrionana*. Dark brown, superior wings with a darker oblique fascia, the costa spotted with white; inferior wings fuscous white.

Expansion seven lines.

Blackish-brown, superior wings somewhat variegated with grey, with an indistinct oblique band across the middle, narrowest at the costa, which is marked with six or

* Curtis's *Brit. Ent.*—vol. viii., fol. 364.

seven silvery white rays, several of them divided by a darker line; cilia ochreous white, spotted at the base with brown; inferior wings, legs, and underside, pale fuscous white.

The box contained two specimens of this small Tortrix, which resembles a little the *T. hybridana* of Hübner, pl. 38, fig. 238.

GEN. 964.—ARGYROTOSA? (Ste.)

23. *Parryana*. Grey, superior wings with an angulated brown band near the base, an incomplete one across the middle, and the apex of the same colour.

Expansion eight lines.

Pl. A, fig. 13.

Brown, head and sides of thorax inclining to ferruginous, apex of abdomen ochreous; superior wings pale grey, with a lilac tinge, and delicately tessellated with brown, an angulated brown band near the base, indistinct at the costa, and another at the middle, vanishing at the interior margin, very narrow at the costa, and angulated and dilated outside at the disc, a round spot of the same colour at the tip, and three smaller ones approaching it on the costa; inferior wings a little paler, the margin and cilia ochreous-fuscous.

The antennæ were broken off of the only specimen preserved of this very distinct Tortrix, which I have named after Sir William Edward Parry.

ORDER XIII.—HEMIPTERA.

FAM.—ACANTHIDÆ.

GEN. 1094.—ACANTHIA. (Lat.)

24. *Stellata*. Blackish sericeous, elytra with a pale spot at the centre, and several at the apex; legs ochreous.

Length three lines.

Black, clothed with very short shining hairs; thorax transverse; the edges beneath subochreous, as well as the centre of the antepectus; scutellum rather large; elytra with the costa reflexed at the base, a semitransparent spot at the base, another on the

disc, and eight or nine arranged in a circle on the submembranous apex; margins of abdominal segments beneath ochreous, and forming a row of dots down each side; legs dirty ochre somewhat freckled with piceous.

The head is wanting to the only specimen I have seen; it most resembles *A. Zosteræ* of Fabricius, but is very distinct from my examples of that insect; as some of its larvæ or pupæ were found, it is probably not uncommon in the Polar Regions.

GEN. 1094 *a.*—PEDETICUS? (*Lap.*)

25. *Variegatus*. Black, sides of thorax and numerous spots on the elytra whitish ochre; legs spotted with white and ochre.

Length two lines and one-third.

Black, clothed with shining pubescence and black hairs; eyes large, very globose and prominent, subferruginous striped with black, the clypeus, excepting a stripe down the middle, apex of the labrum, internal margin of the eyes, and a triangular spot on each side beneath, ochreous; thorax trapezate, gibbose on the back, with a fovea at the centre, the base very concave, the sides pale ochreous; elytra with a pale ochreous patch near the base, another beyond the middle, and a semiorbicular one at the apex, divided into several spots by the black nervures, each bearing a blackish dot; legs hairy; antepectus, coxæ, trochanters, and base of thighs, excepting the anterior, whitish ochre, the thighs striped beneath with black; the tips, two broad bands on the tibiæ, excepting the posterior, and the apical portion of the basal joint of the tarsi, ochreous.

ORDER XV.—DIPTERA.

FAM.—CULICIDÆ.

GEN. 1137.—CULEX. (*Linn.*)

26. *Caspicus*. (*Pall.*) Black, head and thorax griseous, abdomen with seven white bands.

From two to three lines long, from four to six broad.

C. Pipiens. *Fab: Faun. Grænl.*—p. 209, n. 171.

Several females, but not one male, were brought home; this may be accounted for,

either from the males appearing earlier or later, or from their not being sanguinary; I have frequently for a week together found the females of *Culex annulatus* congregated in summer-houses in gardens, without being able to discover a single male.*

Commander Ross remarks, "Of this genus only one species was observed. It first appeared about the 10th of July, on the 15th it became very numerous, and on the 22d so extremely troublesome, as to prevent the necessary duties of the ship. They were in perfect clouds over the marshes, and their larvæ constitute the principal food of the trout that inhabit the lakes. It was only in the beautiful summer of 1830 that we found them so very numerous. On the 13th of August of that year they came out again after the rain, but were no longer very troublesome, being apparently nipped by the frost at night; indeed soon after this time the ground was again covered with snow, and all entomological observations were terminated."

FAM.—TIPULIDÆ.

†GEN. 1140.—CHIRONOMUS. (Meig.)

27. *Polaris*. (Kirb.) Black hairy, wings lacteous, iridescent, the costa fuscous, with the nervures darker, halteres dirty ochre.

Length three lines and three-fourths, breadth six lines.

Ch. *Polaris*. Kirby in *Supp. to App. of Capt. Parry's 1st Voyage*—p. ccxviii.

Pl. A, fig. 14, female; fig. 2, head of same in profile.

No males of this species were brought home, and only three females, none of which retained their first pair of legs, which are therefore merely sketched in the plate to show their situation.

28. *Borealis*. Black, thorax grey, abdomen with seven whitish rings; costa fuscous; legs lurid.

Length three lines, breadth six lines.

Black, basal joint of antennæ ochreous; thorax hoary; abdomen clothed with long subdepressed yellowish hairs, the margins of the segments shining whitish or silvery; wings lacteous, opalescent, the costa fuscous, the nervures darker; halteres yellowish; legs dull castaneous ochre, tips of the thighs and tarsi fuscous.

Only one specimen has come under my observation, and that had lost its antennæ and some of its legs.

* Curtis's Brit. Ent.—vol. xii., fol. 527.

† Ib.—vol. ii., fol. 90.

GEN. 1160.—TIPULA. (Linn.)

Division A with the fourth cell of the wings peduncled.

29. *Arctica*. Cinereous, wings clouded with brown; legs subferruginous, tarsi fuscous. Length ten lines and a half or eleven lines, breadth one inch and seven to eight lines. Pl. A, fig. 15, female; fig. 4, underside of apex of abdomen of the same.

Silky slate colour; thorax with a brown line down the centre, a stripe of the same colour on each side, furcate at the base; abdomen more cinereous, the incisures slightly ochreous, the apex horny, with a large oval piceous and shining shield above, terminated by two moveable, lanceolate, serrated, and ferruginous lobes, curved at the apex, the penultimate joint furnished with two long slender spines beneath (fig. 4); wings clouded with brown, forming a spot on the stigma and another behind it, and leaving several large transparent and irregularly-formed spots along the disc, the costa and base are ochreous, the nervures dark brown; halteres dull and pale ochreous, fuscous at the tip; legs dull ferruginous, tips of thighs, tibiae, and tarsi, black.

Specimens only of the female were preserved, and none of them had antennæ, or the anterior feet. "They appeared," says Commander Ross, "about the same time as the *Culex*, and were equally numerous. Their larvæ are the principal food of the plover and other birds that seek their prey in the marshes, as was proved on the 27th of June, when great numbers of the larvæ of the *Tipula*? were taken from the stomach of a gull that had been feeding in the marshes."

This fine species of *Tipula* is remarkable for the singular termination to the apex of the abdomen, being, I imagine, an extraordinary development of the sexual organs. I have never seen any other species like it in this respect, excepting one lately described under the name of *T. montana*,* which has the same horny shield and broad serrated forceps, and it is worthy to be observed that this species is attached to elevated districts in the north, having only been found on Skiddaw and mountains of Scotland in July, by Mr. Dale and myself.

FAM.—SYRPHIDÆ.

†GEN. 1245.—HELOPHILUS. (Meig.)

39. *Bilineatus*. Black, pubescent, two pale lines on the thorax, six lunulate spots on the abdomen, the first two yellow, as well as the base of the tibiae.

Curtis's Brit. Ent.—vol. xi., fol. 493, no. 9 a.

† Ib.—vol. ix., fol. 429.

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Length four lines and a half to six lines, breadth nine to ten lines and a half.

Black, clothed with short yellowish pubescence; face yellow or white with very short hairs, excepting a black shining space down the middle; antennæ brown except at the base, the seta ochreous; thorax with two narrow yellow lines down the fore part of the back; scutellum dull ochreous; abdomen with a rather large bright ochreous trigonate-lunate spot on each side at the base, and colouring the sides of the first segment beneath, the two following with a transverse yellow lunate spot on each side, the first pair sometimes being bright ochreous outside; base of wings and costa tinged with dull yellow, stigmatic spot fuscous, nervures black, alulae and halteres ochreous; base of the tibiae, and sometimes the apex of the thighs, ochreous.

The box contains three specimens.

FAM.—MUSCIDÆ.

GEN. 1276.—TACHINA. (Ill.)

31. *Hirta*. Black, very bristly, face silvery, hairs on back of head grey, scutellum subochreous.

Length six lines, breadth ten lines.

Black, pubescent, and covered with long bristles, especially the abdomen; head trigonate, silvery-white, excepting the crown, the hairs behind the eyes grey; eyes naked; antennæ with the third joint long and elliptical, seta stout at the base; thorax with four indistinct whitish lines before; scutellum tawny except at the base; wings similar to fig. 23, tab. 41, of Meigen, yellowish-brown at the base; squamulae ochreous.

A single specimen was preserved, which I believe was bred from the Laria.

GEN. 1287.—ANTHOMYIA. (Meig.?)

32. *Dubia*. Cinereous, eyes margined with white, thorax with three fuscous stripes. Two lines long, three lines and a half broad.

Grey-ash colour, sparingly pilose; antennæ with the basal joint minute, the second subtrigonate, third scarcely larger and oblong; eyes reddish-brown, face dull shining white, crown of head ash colour; thorax with three fuscous stripes down the back, and an indistinct one on each side; wings rather broad, iridescent, the nervures and legs black.