seasons; and the remarks we have made apply exclusively to the barren-ground deer. A larger kind is said to remain the whole year in the woody parts of the country, migrating southwards in the summer season to the thickly-wooded swamps and marshes which skirt the coast of Hudson's Bay, betwixt Nelson and Severn Rivers. Hearne states that this variety has smaller horns than the barren-ground kind, although the weight of their carcasses is much greater*. They are like the others, infested by the gad-fly. In the beginning of September, vast numbers of this kind of deer pass near York Factory, in latitude 57°, on their journey towards the north-west.

When the rein-deer is in good condition, it is equal, if not superior, in flavour to the finest English venison. Almost every part of it is eaten by the Indians in one shape or another. The hunter breaks the leg bones of the recently-slaughtered animal, and whilst the marrow is still warm, greedily devours it. The legs and feet thus deprived of their marrow, fall to the lot of the females, who eat the sinews and membranous parts also raw. Portions of the intestines, too, are occasionally eaten raw, particularly the thin folds of the third stomach, or many-plies. The summits of the antlers likewise, as long as they continue soft, are delicacies in the raw state. The remainder of the animal is eaten when cooked, nor do the contents of the paunch escape. They are eaten sometimes raw, sometimes boiled along with the blood of the animal; and it would appear that the *lichens* and other vegetable matters are rendered more digestible by the human stomach, after having undergone mastication, and become mixed with the salivary and gastric juices of a ruminating animal. Many of the Indians and Canadian voyagers prefer this savoury mixture after it has undergone a degree of fermentation, or lain to season, as they term it, for a few days. The paunch and its contents are likewise esteemed to be delicate food by the Esquimaux and Greenlanders, the former of whom term it *nerrooks*, the latter *nerrokak*, or *nerriookak*. In the spring, when the *larvæ* of the *æstrus* which are lodged in the fauces, and about the posterior parts of the nostrils, have attained a large size, those parts of the animal are considered as choice morsels by Indian epicures. When the whole of the soft parts have been consumed, the women pound the bones betwixt two stones, and by boiling, extract the marrow for the purpose of forming the better kinds of the mixture of dried meat and

* HEARNE, *op. cit.* p. 195-200, which may be consulted with advantage by those who are desirous of knowing more respecting the manners of this interesting animal.

See also Captain Franklin's Narrative, p. 240-245.

fat, termed pemmican; and most of the young females preserve some of the marrow in a bladder, to anoint their hair with on dress occasions.

12. Bos moschatus. (*L.*) *Musk Ox.*

Bos moschatus. *Supplement to Parry's First Voyage*, p. clxxxix. *Appendix to Franklin's Journey*, p. 668.

Musk Ox. *Hearne's Journey to the Northern Ocean*, p. 135.

Musk Ox and Oomingmuk. *Parry's Narrative of Second Voyage*, p. 497, 503, 504, 505, 512.

The coincidence between the Esquimaux name of this animal *oomingmak*, and the oomimak or umimak of the natives of Wolstenholm Sound and of the Greenlanders, has been pointed out by Captain Sabine, together with the singularity of the latter people having been able to preserve the name, and a general idea of the form of an animal through tradition only. Neither the Crees nor Copper Indians possess an original name for the Musk-ox, the former calling it *mathchmoostoosh*, or ugly bison, and the latter *adgiddah-yawzeh*, or little bison.

No Musk-oxen were seen by our navigators on the present voyage, but dishes or spoons formed out of their horns were observed in the hands of the Esquimaux. They do not visit Melville Peninsula, but keep more to the westward, near the banks of some of the larger rivers, on which alone willows or spruce trees sufficient to shelter them are to be found. Their appearance on Melville Island in the month of May, as ascertained on the former voyage, is an interesting feature in their history. Supposing them to have travelled directly northwards, they must have migrated at least seven degrees of latitude from their winter quarters on the continent. Their journey in the spring was performed on the ice, but as that must have been at least partially broken up when they returned in September, it is more than probable that there is a chain of islands by which they were conducted to the main land.

The food of the Musk-ox is the same with that of the rein-deer, and the footmarks of these two animals are so similar, that we have known hunters of some experience mistake the one for the other. The mark of the Musk-ox's hoof, however, is a little narrower. The winter coat of this animal yields a fine wool that would be a valuable acquisition to our manufacturers. It is hunted in its winter retreats by the Esquimaux only, none of the Indian tribes ever visiting the barren grounds at that season. At present, the Musk-ox is not found in a lower latitude than 66°, but formerly they came much farther to the southward,

and their flesh used to be brought by the natives to Fort Churchill in latitude 58°. It would appear that they are retiring to the northward, probably owing to the alarm created by the attacks made upon them by fire-arms. It is worthy of remark, that the *Bos Americanus*, or *bison*, has also retreated to the northward. Until very lately, they were never seen beyond Slave Point, in latitude 61° 30′; but, in 1821, they are said to have visited, for the first time, the neighbourhood of Great Marten Lake, in latitude 64°. When a herd of Musk-oxen are fired upon, if the hunters keep themselves secluded from their view, they mistake the noise for thunder, and form themselves into a circular group, crowding nearer together as their companions fall around them. When they discover by the sense of smell the presence of man, the whole herd seek safety by instant flight; but a wounded individual often turns upon its pursuer, and thus falls a more easy prey, for the hunter by frequent wheeling easily avoids the pushes of the infuriated animal, and finds an opportunity of stabbing it in some vital part.

They were observed by Captain Franklin's party to rut in the end of August and beginning of September, and Hearne says that they bring forth one calf at a time in the latter end of May or beginning of June. He remarks also, that very few bulls are seen in a herd, and supposes that they kill each other in their contests for the cows. When the Musk-ox is fat, its flesh is well tasted, and it is then preferred by the Copper Indians to the rein-deer. The flesh of bulls is high flavoured; and both bulls and cows, when lean, smell more strongly of musk, their flesh at the same time being very dark and tough. The contents of the paunch and other intestinal parts are relished as much by the Indians as the similar parts of the rein-deer.

13. Phoca fœtida. *Rough Seal.*

Phoca fœtida. *Zoolog. Dan. Mull. prodr.* p. viii. *Faun. Grænl.* 13.

Phoca hispida. *Gmel. Lin.* i. p. 64. *Shaw's Zoology*, i. p. 239.

Rough Seal. *Penn. Quadr.* ii. p. 278 (where it is confounded with a larger species), and *Arctic Zoology*, i. p. 160.

Neith heek, or Neitiek, (*middle-sized* kairolik, *young* ibbeen). *Esquimaux* Neitsek. *Greenlanders.*

Small seal, and Phoca hispida, and Neitiek. *Parry's Narrative, Second Voyage*, p. 172, 178, 386, 423, 424, 505, 506.

This species approaches very near to the phoca vitulina, or common seal. The teeth, vibrissæ, tongue, ears, tail, flippers, and claws of both are alike, and the

principal differences which have been pointed out by Fabricius, are as follow: in the *common seal*, the head is a little depressed, the nose is of a moderate size, being one-third of the length of the head; the pupil of the eye is black, with a greyish-brown iris; the neck is lower, or has a less vertical diameter, than the head; the body is almost cylindrical, the space betwixt the hind feet being nearly as great as that betwixt the fore-feet; the fat is not oily, and the flesh is more edible than that of any other seal found in the northern seas. The *rough seal*, on the other hand, has a short roundish head, of which the nose forms less than one-third part; the pupil of the eye of a dull white colour, with a pure brown iris; a thick neck, elliptical body, oily fat, and the flesh very fœtid and disagreeable, particularly that of the old males, which is nauseated by the Greenlanders themselves. They differ also in their habits, the common seal being remarkable for its caution, acuteness in perceiving danger, and its more active habits; whilst the rough seal is easily surprised either on land or water, and is moreover a solitary and a lazy animal, being wont to lie basking in the sun in place of hunting after its prey, and thus being often found lean from want of nourishment. The latter is also a smaller species, seldom exceeding 4½ feet in length, according to Fabricius.

The only character that can be perceived in the dried skins for distinguishing the species, consists in the greater quantity of entangled woolly hairs at the roots of the fur of the rough seal, which have the effect of preventing the longer hairs from lying so close as in the common species, and of giving them the sub-erect position, from whence the specific appellation of hispida. In the young of the rough seal the whole fur is woolly, and forms a thick fine coating, on which account the Esquimaux prefer their skins for clothing before those of any of the other seals they are acquainted with. The woolliness of the fur of the common seal is much less remarkable than in the rough seal of a corresponding age.

The rough seal, like the common one, varies much in colour. The very young individuals, seen by Captain Parry, were totally white, and the fœtal ones had a yellowish white colour like raw silk. A specimen brought home of a young one about six weeks old, killed in the end of April at Igloolik, is entirely of a pure shining yellowish white colour without any dorsal line: another, three feet long, perhaps a year old, corresponds with the general description Fabricius gives of the young. It is without spots, and all the long hairs are white but on the head, back, and tail; the short woolly coat at their roots has a shining greyish-black colour, and as it is partially visible, it gives a dark appearance to

these parts. One variety, known in Greenland by the name of *ukalleriak*, grows up of a white colour, marked merely with an obscure dark dorsal line. In general, however, the rough seals, as they grow older, exhibit more and more colour in their fur, and the arrangement of these colours is somewhat different from what takes place in the common seal. In the latter, they are generally greyish-black in distinct spots of very various and often considerable magnitude, upon a yellowish-white ground; in the former, the ground colour is the same, but the spots are very deep reddish, or blackish, brown of smaller size, but inosculating freely with each other, so as to produce a marbled appearance. In both species the abdomens are whiter than the back, and occasionally interspersed with distant small spots.

The specimens of the *P. fœtida* brought home have seven rows of whiskers. The setæ are all compressed and undulated with an appearance of articulation between each undulation; the upper rows are darker coloured and shorter, the lower ones longer and colourless, the exterior setæ of the lowest row are the longest.

The rough seals were seen in great abundance, both in the summer and winter, in the course of the voyage, and many interesting particulars respecting them are interspersed through the narrative*. They form the principal subsistence of the Esquimaux of Melville Peninsula in the winter time, and are also the chief dependance of the Esquimaux that frequent the mouth of the Coppermine river in the months of March, April, May, and June.

The rough seal, according to Fabricius and other observers, lives under the fixed ice, in which it has a small foramen for breathing, and a larger one to ascend by when it is satiated with food. The Esquimaux informed us, that the seal makes these holes with its teeth, indeed its claws would be inefficient weapons for wearing away the hard ice of the northern winters†. As two of these seals seldom use the same hole, the degree of labour to the solitary animal must be

* See particularly p. 171, 177, and 424.

† The *phoca vitulina* also lives under the fixed ice, in which it has a foramen, but the same foramen is common to a number. Linnæus thus mentions the fact: "Grey seals *(phoca vitulina)* are hunted in winter. They lie upon the ice often in great numbers close to a hole they have made in it. If it should freeze over, they travel to the south-west till they can get at water, always proceeding straight-forward, even though they meet with mountains in their way; and they return in the same direct line back again. The seals are able to penetrate through the ice from beneath, lying on their backs under water be it ever so thick, but cannot make their way into it from above."—*Lachesis Lapponica*, ii. p. 237.

very great when the ice is thick, for the perforation is necessarily shaped like an inverted funnel. Our navigators often saw these perforations completed in a single night. According to the Labrador Missionaries, the rough seal makes for itself several large caverns, to which it retires in the months of February and March to bring forth its young; when disturbed in one cavern it takes shelter in a second.

A slight blow on the nose with the edge of the hand is sufficient to kill this seal, but wounded elsewhere it is tenacious enough of life; and when it receives a shot in a vital part, it generally sinks to the bottom and dies there.

14. Phoca barbata. *Great Seal.*

Phoca barbata. *Faun. Grænl.*, p. 15. *Gmel. Lin.*, i p. 65
Great seal. *Penn. quadr.*, ii p. 277. *Arctic Zoology*, i. p. 159.
Ogg œook. *Esquimaux of the Welcome* Ogûke. *Esquimaux of Melville peninsula.*
, Urksuk *Greenlanders.*
Great seal and Ogûke. *Parry's Narrative. 2d voyage*, p. 171 (and figure,) 178, 457, 469, 505.

This seal does not live under the fixed ice, like the preceding species, but keeps amongst the floating fragments near the open water. In such situations it was often seen by our navigators, and sometimes killed by them, but more frequently by their Esquimaux visiters, whose mode of proceeding is detailed in p. 457 of the narrative.

It is distinguished from the other seals by its great size*. It is often ten feet long and the young of the second year are stated by Fabricius to measure nearly seven feet. It is further distinguished from the other seals common in the northern seas, by its whiskers, which are curled at the ends, being entire not undulated, the black pupil of its eye being rounded not linear, the iris brown, and still more decidedly by the form of its fore feet or flippers.—"Singulares habet pedes anticos longos, digito medio longissimo, quem sequitur sinister ejus, tunc dexter, extimus, intimus longitudine, qua nota optime a reliquis dignoscitur." (*Fabricius.*)

The flesh of the great seal and its fat, which is abundant, but not rich in oil, is much prized as an article of food, by the Greenlanders and Esquimaux.—The skin being very thick and in old individuals almost destitute of fur, is seldom

* Capt. Lyon, in his private Journal, p. 72, gives the dimensions of one, eight feet long, and weighing nearly 9 cwt.

used for clothing by the natives, but it is cut into sledge traces, fishing lines, and applied to a variety of domestic purposes.

15. PHOCA GRŒNLANDICA. *Harp seal.*

Phoca grœnlandica. *Fauna Grœnl.*, p. 11. *Gmel. Lin.*, i. p. 64.
Harp seal *Penn. quadr.*, ii p 279. *Arctic Zoology*, i. p. 163.

NONE of this species were killed by our navigators, but a skin observed to be in the possession of the Esquimaux of Melville peninsula, by Mr. Edwards, enables us to rank them as inhabitants of those seas.

16. BALÆNA MYSTICETUS. (*Lacepede.*) *Black whale.*

Aggă-wĕk (Yookai *whale bone.*) *Esquimaux.*
Black-whale. *Parry's Narrative, second voyage, August 17-28th, September 13-19th*, 1821, p. 301, 505, 515.

BLACK whales were frequently seen in Hudson's Straits, in the Frozen Strait near the shores of Melville peninsula, and in page 510 of the Narrative they are said to be most abundant about Eiwillik. The Hudson's Bay Company once carried on the whale fishery in the Welcome, but not finding it profitable they have abandoned it for many years.

For ample details respecting this animal, so important from the vast capital and the number of seamen annually engaged in its capture, the reader is referred to Martens' Voyage to Spitzbergen, and to the more recent, and excellent, publications of Captain Scoresby on the subject. It may be proper to mention, however, in this place, that the latter writer, whose authority in this matter is of the greatest weight, states the figure of the *nord-caper* in Lacepede's work to be an exact representation of the *mysticetus* or black whale, but that there is no existing whale which agrees with the figure of the same author, erroneously said to be that of the *baleine franche* or *mysticetus*.

17. MONODON MONOCEROS. (*L.*) *Narwhal Sea-unicorn.*

Monodon monoceros. *Supplement to Parry's first voyage*, cxii.
Keina-lov-a. *Esquimaux.*
Narwhal. *Parry's Narrative, Second voyage, August 12-15th*, 1821.

THE Narwhal was frequently seen in Hudson's and Frozen Straits.

The germs of two horns, or as they ought to be more properly termed fore-

teeth, are to be found in this animal, but in general the left one only comes to perfection*. Some rare instances are noticed by authors in which there were two complete ones. In the thirteenth volume of the *Linnæan Transactions*, p. 620, there is an account of a female, which had a perfect tooth in the upper jaw, similar to, though not so large, as that in the male.

An account of a second species of this genus, (*narwalus microcephalus*, Lacepede,) is given by Dr. Fleming in the memoirs of the Wernerian Society, i. p. 146.

13. Delphinapterus beluga. (*Lacepede.*) *White whale.*

Delphinus leucas. *Gmel. Lin.* 232.
Delphinus albicans. *Fauna grœnlandica*, p. 50.
White whale. *Parry's Narrative, second voyage, August 15-16th, September 13-15th*, 1821, p. 302.

The Hudson's Bay Company formerly carried on a fishery for the capture of these animals at the mouth of Churchill river. They were seen abundantly by Captain Parry in the Frozen Strait, Lyon's Inlet, the Strait of the Fury and Hecla, and in various other quarters. Martens remarks — "when we see plenty of white fish it is the sign of a good year for catching whales, for if they find good food, the whales find the same also †."

For a figure, and good account, of this animal, with many important anatomical details, the reader may turn to the *Wernerian Transactions*, iii. p. 371.

Capt. Lyon remarks, that the cubs of the Beluga are uniformly of a slaty hue. (*Private Journal*, p. 69.)

19. Trichecus rosmarus. (*L.*) *Walrus*

Trichecus rosmarus. *Supp. to Parry's first voyage*, cxci. *Faun. grœnl.* p. 4.
Arctic walrus. *Penn. quadr.*, p. 266. *Arctic Zoology*, i. p. 144.
Sea-horse, Morse or Morss. *Martens' voyage to Spitzbergen*, p. 107. *Supplement*, p. 183.
Ei-ú-ĕk. *Esquimaux of Melville peninsula.* Ej-ee-werk. *Esquimaux of the Welcome.*
Walrus or Sea-horse. *Parry's Narrative, second voyage*, p. 22, 178, 268, 355, 386, 415, 418, 469, 505, 510.

The manners of these animals have been often described by voyagers, and their various details as collected by Pennant form an amusing and instructive article.

* Cuvier *règne animal*, I. p. 281. *Fauna Grœnl.* p. 30.
† *Voyage to Greenland and Spitzbergen*, p. 126.

It is but just to Martens, however, to state that his account, although one of the oldest, is still one of the best, modern writers having added few facts of importance. Fabricius as usual gives a concise and accurate description; and we may refer to the figure in Captain Cook's third voyage, as giving the best idea of the form of the animal.

They feed, Cuvier remarks, partly on animal substances, and partly on marine algæ. Martens says,—"What their food is I cannot certainly tell, they may perhaps eat both *herbs* and *fish*; that they eat *herbs*, I conclude from hence, that their dung looks like horse-dung; that they eat *fish*, I judge, because when we cut the fat off a whale, one of them did often take the skin with him under the water, he did also fling it up and catch it again. The *Burgermeister* doth eat his dung." Fabricius acquaints us that they eat muscles, which they hook up with their tusks. Mr Edwards sometimes observed a small intermixture of *fuci* with the *mollusca*, which their stomachs generally contained, and Captain Lyon found three pounds weight of pebbles, together with a handful of sea weed, in the stomach of a female. (*Private Journal*, p 225.)

Besides the hooking up of their food just mentioned, their tusks serve another important purpose. "When they awake they rise up and stand upon their fore-foot, look terribly and roar, and strike with their long teeth into the ice for madness, and so draw themselves along by the help thereof," (Martens, p. 111.) In making these movements and in their contests with the polar bear, their teeth are often broken. "You shall see," says Martens, "almost a hundred of them before you find one that hath good teeth, for some are but small, others have but one, and others none at all."

The bellowing or barking of the walrus may be heard, Captain Parry states in his Narrative, (p. 268) in calm weather at the distance of two miles.

The walruses were very numerous at Igloolik, and on the other parts of the coast to the eastward of the Fury and Hecla's strait. They are not found, however, at the mouth of the Copper Mine river, although the black whale has been sometimes drifted thither. They were observed by Captain Parry to huddle themselves into separate droves of from twelve to twenty, many such droves being observed on the same beach. The weight of a moderate-sized female killed by our navigators was 15½ cwt. Their flesh is preferred by the Esquimaux before that of the small seal, (phoca hispida) their feet or fins are considered as delicacies, and the heart and liver were pronounced by our navigators to be excellent. The tongue is said to be good when fresh, but becomes oily by keeping.

We subjoin the following description by Mr. Edwards, containing many particulars not to be found in books.

Length from the end of the snout eight feet ten inches.

Shape of the body oblong, its circumference below the fore arms being six feet ten inches, and continuing the same for about four feet, before it slopes off towards the extremity, where it is only one foot. The neck tapers gradually from the shoulders, and unites insensibly with the head. From the eyes forward, the head is more cylindrical, swelling out however at the extremity, and then rounding off into a broad obtuse fleshy snout, whose lower edge overhangs the mouth in form of an arch. This snout is partially bilobed by the nasal depression, and is as Fabricius well remarks, "natibus hominis non dissimilis." The mustachios are formed of hard hollow pellucid bristles, placed in transverse rows. The bristles increase in length as their origin is more remote from the sulcus of the lip, and the exterior ones of the lowest row are the longest of all. These mustachios hang downwards, and curve inwards, so that they would meet if prolonged beneath the chin.

The under jaw being necessarily narrow to admit of its reception betwixt the tusks, the mouth is small, compared with the breadth of the snout. The tusks in this individual were as yet small, not projecting more than four inches above the gum. They were four inches apart at their base. The shape and curvature of the tusks of the morse render them important instruments of locomotion on rocky shores and on ice. The seals are enabled by the perfection of their claws to move and climb about with facility, but in the morse the claws are too imperfectly developed and disadvantageously situated, to be of much use in this way. There were on one side two incisores similar in form to the grinders, and on the other side three. The grinders were two on each side, posterior to the tusks, obliquely truncated, and scarcely rising above the gums.

The lower jaw is rather pointed, moving betwixt the tusks, and projecting about two inches past them. The nares are semilunar, about one inch long, have their crescentic edges turned outwards, and are separated by a septum three-quarters of an inch wide above, and one and half wide below.

Eye-lids prominent, pupils circular, irides dark brown, ciliary circle white *. Auricular apertures very small, merely admitting a goose quill, and a little higher than the eyes.

* Pennant, quoting from Crantz, says the eyes are small, and retractile from external injury, and Captain Sabine states that they were prominent in an individual examined by him.

The body is covered above with short coarse dusky grey hairs, and below it is scantily supplied with softer bay-coloured hair.

Upper limb. The flipper composed of five fingers, connected at their very extremities by a strong web. Length from shoulder joint to the finger ends, two feet. Expansion of the flipper, one foot. The inner finger is the longest, the outer ones become gradually shorter. *Claws* weak, and situated one and half to two and half inches from the ends of the toes. *Hinder flippers* twenty-one inches long, and when stretched out, extending eighteen inches behind the body. Toes five, of which the two extremes are long and strong, the inner ones short and weak. They are connected by a web, naked below, but furnished above with a few scattered hairs. Expansion two feet. The *claws* are weak, and are placed high up, at a distance from the ends of the toes. Os coccygis, covered with the rudiments of a tail. The aperture of the sheath of the penis lies seven inches behind the umbilicus, and twenty-eight inches anterior to the os coccygis. Four abdominal teats fifteen inches apart, placed in the corners of a quadrangle, and having the umbilicus in the centre.

Anatomical notices. *Heart* weighing eight pounds. Parietes of the left ventricle very thick. Foramen ovale closed. Fossa ovalis well defined. The *Aorta* gives off a solitary coronary artery, immediately above the semilunar valves. It is capable of admitting a swan quill. The aorta itself, at that part, has two inches internal diameter, and at the arch 2.6 inches. The first vessel which arises from the arch is the right subclavian, the second the innominata, which is an inch long, and divides into the two carotids, the third is the left subclavian. The *gall bladder* contained a pint of *bile* of the specific gravity of 1.0404.

The *kidney* nearly elliptic, weighing five pounds, is composed of very numerous lobes nearly incorporated. There are upwards of 400 papillæ, having as many distinct infundibula. The urinary bladder, capable of holding a gallon, is completely covered by the peritonæum, and is remarkable for the thickness and strength of its muscular coat. The ureters open close to the cervix, and within an inch of each other. No prostate gland nor vesiculæ seminales.

Besides the nineteen species of mammalia above noticed, a skin of a small animal of the weasel tribe was obtained from the Esquimaux of Hudson's Straits. It probably belonged to the *mink* of the fur traders, the *atjackash* of the Cree Indians, or *lesser otter* of Canada, which has been identified by Forster with the *mustela lutreola* of Europe. Mr. Graham, in Arctic Zoology having ascribed the manners of this animal to the fisher or *mustela Pennanti*, much

confusion has been produced. Pennant has described the mink under the name of *Pekan* *.

It is probable also that the American bear (*u. Americanus*,) the otter (*lutra Canadensis*, SABINE, *Frank. App.* p. 653,) and the musk rat (*arvicola zibethica*, CUV.,) inhabit the neighbourhood of Repulse Bay, as they are found in equally high latitudes a little farther to the westward. The former of these animals is termed *neekeek* by the Cree Indians, and the latter *watsass* or *musquash*. The list of mammalia, therefore, in the quarters visited by Captain Parry, ought most probably to extend to twenty-three or more. The beaver (*castor fiber*,) the squirrel (*sciurus hudsonius*,) the Canada porcupine (*hystrix dorsata*,) several varieties of the fox (*canis vulpes*,) and the American hare (*lepus Americanus*,) are also found far north on the continent of America, but they frequent the wooded districts alone.

* Vide FORSTER. *Phil Trans.*, lxii. p. 371. *Arctic Zool.* i. p. 79 and 82. FRANKLIN'S *Journal*, p 90 and 652

BIRDS.

1. Falco peregrinus. (L.) *Peregrine.*

Falco peregrinus. *Temm.* p. 22. *Greenl. Birds*, p. 529.
Peregrine falcon. *British Zoology*, i. p. 218, t. 20, and Lanner. *British Zoology*, i. p. 223, t. 23. *Arctic Zoology*, ii. p. 262, No. 97.
Peregrine and falco peregrinus. *Parry's Narrative Second Voyage, June* 18.

The specimen received was killed in Five-Hawser bay on September 8th, 1821, and is a young male, apparently of the second year.

Peregrine falcons were seen at various periods during the voyage, following the flocks of the snow-bunting, particularly on June 18th, 1821, near Cape Farewell on the coast of Greenland, and on August 12th, in the Frozen Strait on the coast of America. They seem to be summer visitors of these northern countries; but the *falco palumbarius*, named by the Esquimaux *oodno-ah-hœoot*, remains in high latitudes all the winter preying principally on the ptarmigan.

2. Strix nyctea. (L.) *Snowy owl.*

Strix nyctea. *Temm.* 82. *Supplement to Parry's First Voyage*, p. cxciii. *Fabr. Fauna Grænl.* p. 60. *Forst. Phelos. Trans* lxii. p. 385.
Snowy owl, white owl. *Arctic Zoology*, ii. p. 233, No. 121. *Hearne's Journey*, p. 401.
White owl. *Parry's Narrative, Second Voyage, August* 22, 1821.
Wappakeethoo, or Wap-poo-hoo *Cree Indians.* Ook-pēē-guak. *Esquimaux.*

A bird two or three years old was killed in the middle of September on Liddon Island, corresponding exactly with Fabricius's excellent description above quoted. It measures twenty-eight inches.

The Snowy owl remains in high northern latitudes the whole year. It preys in the day time, and we once saw one in lat. 64° in the middle of winter, repeatedly striking at an American hare, which was at the same time pursued by a wolverene. Hearne states, that this bird lays four eggs, of which two only are in general hatched.

3. Corvus corax. (L.) *Raven.*

Corvus corax. *Temm.* p 107. *Supplement to Parry's First Voyage*, cxciv *Appendix to Franklin's Journey*, 671. *Fabr. Fauna, Grœnl.* p. 62.
Raven. *Arctic Zoology*, ii. p. 245, No. 134. *Hearne's Journey*, p. 403.
Cuck-oo. *Cree Indians.* Toollooak. *Esquimaux* Toollogak. *Greenlanders.*
Raven. *Parry's Narrative, Second Voyage, August* 22, 1821. p. 183, 234, 236, 372.

These birds are frequent in the northern tracks of America, and are of the few that do not leave them in the winter. They follow the rein-deer in their migrations, and when the wolves, which also hang upon the skirts of the herd, are successful in the chase, come in for a share of the spoil. Their scent is astonishingly acute, for when a deer has been killed by a hunter, or driven over a precipice by the wolves, they discover it even in the intense colds of winter, and flock from all quarters to feast on the offal. They often prove troublesome to the fur hunters by robbing their traps, and are not unfrequently caught themselves; shewing much less dexterity in avoiding the snare than the Canada jay, which is equally annoying and still more familiar. They pair in March, earlier than any other birds in those quarters, except the Canada jay just mentioned.

4. Alauda alpestris. (L.) *Shore-lark.*

Alauda alpestris. *Temm.* p. 279. *Forster, Phil. Trans.* lxii. p 398.
Shore-lark. *Arctic Zoology.* ii. p. 392, No. 278.
Chee-chup-pee-shew. *Cree Indians.*

A specimen of this bird killed on the 10th July, 1822, near Cape Wilson, corresponds sufficiently with the descriptions of authors.

5. Emberiza nivalis. (L.) *Snow-bunting.*

Emberiza nivalis. *Temm.* p. 319. *Greenl. Birds*, p. 531, No 5. *Supplement to Parry's First Voyage*, p. cxciv. *Appendix to Franklin's Journey*, p 675. *Faun. Grœnl* p. 117, No. 81. *Forster, Philos. Trans.* lxii. p. 403.
Snow-bunting. *Arctic Zoology*, ii. p. 355, No. 222. *Hearne's Journey*, p. 419.
Sheegun-peetheesees. *Cree Indians.* Kŏpĕnnŏ-ăccă-ŭ. *Esquimaux.*
Snow-bunting. *Parry's Narrative, Second Voyage, June* 18*th*, *July* 24*th*, *August* 22*nd*, 1821. *April* 27*th*, 1822, p. 214, 236, 265, 330, 332, 462.

Amongst the specimens of this bird received are two males, each measuring seven inches. One killed on May 10th presents precisely the colours of *le vieux*

male en plumage d'hiver, TEMM. and the other killed on the 27th of the same month, is in complete summer plumage, with only the pure black and white colours. These two specimens shew, in the most satisfactory manner, how the change to the summer plumage takes place, by the tips of the feathers on the parts tinged red dropping off, as mentioned by Temminck. A very few of the red points remain on the second specimen, but they drop off on the slightest touch, and the unequal and somewhat wiry appearance of the other feathers, mark the recent loss they have sustained of their coloured margins.

A female killed on the 10th of June, is noted by Mr. Edwards as having the crown and nape black with white tips. Fabricius remarks correctly, that the white feathers of the back and belly when blown aside, appear black at their bases. This occurs both in the summer and winter plumage of the male bird.

The snow-buntings frequent the shores of the Arctic Sea during the summer season, retiring inland in the winter to shelter themselves in wooded tracks. At Cumberland House, in the interior of the country, and in lat. 54°, they remain the greater part of the winter, absenting themselves only occasionally, during the severe storms of December and January. At Fort Enterprise, in lat. 64°, they were also seen in the winter but more rarely, and in a register kept for a series of years at Fort Churchill, in lat. 59°, on the sea-coast, they are noted as arriving from the 26th of March to the 7th of April; disappearing in the summer, returning again in the end of September, and remaining for about a month. It is mentioned as a rare occurrence that one was killed in December. They made their first appearance at Captain Parry's winter quarters in lat. 66°, on the 27th of April. In their winter migrations, they reach, according to Wilson (*Amer. birds*), as far south as the borders of Maryland.

They breed on Melville peninsula, and Captain Lyon describes their nest as being placed in the crevices of rocks or amongst loose stones, and constructed of dried grass neatly lined with white deers' hair. They lay seven eggs. (*Parry's Narrative*, p. 462.)

Pennant remarks, that it is singular that a graminivorous bird should resort to the barren regions of the Arctic circle; but Mr. Brown has pointed out, that the grasses which grow on the islands of the Arctic Sea, form nearly one fifth of the phænogamous vegetation, a proportion nearly double to what occurs in any other part of the world. These grasses retain their seeds all the winter, and thus furnish nourishment for the birds which arrive upon the

melting of the snow*. The snow-bunting, moreover, feeds, as Temminck remarks, also on insects, and Wilson found their stomachs filled with shell-fish. Fabricius† and other writers mention that the male loudly serenades the female during incubation, but that his song ceases when the young are hatched. Sir George Mackenzie informs us that the song is pleasing, and resembles the first three or four notes of the robin‡, whilst Marten, who perhaps was not musical, says, "I can tell nothing of its singing, only that it whistleth a little as birds use to do when they are hungry." *Spitzb.* p. 73.

6. Emberiza calcarata. (Temm.) *Lapland finch.*

Emberiza calcarata. *Temm.* p. 322.
Fringilla lapponica *Lin. Syst. Nat.* i. p. 317. *Faun. Grœnl.* p. 119. No. 82. *Forst. Phil. Trans.* lxii. p. 408.
Lapland finch *Arctic Zoology*, ii. p. 377, No. 259 *Hearne's Journey*, p. 420.
Tecurmashish *Cree Indians* Kernee-ook-tarai-ah, or, kerniuk-tārioo *Esquimaux.*
Lapland finch. *Parry's Narrative, Second Voyage*, p. 462

A *male in breeding plumage* was killed in the middle of June at Igloolik, of which the description is as follows:—

Colour of the whole head, throat, fore-part of the neck, and upper-part of the breast, forming one mass of velvet black, except that there are a very few reddish specks on the occiput, and that a reddish-white band runs nearly from the bill, over each eye, and from thence backwards to unite with a whitish line, that bounds the black of the occiput posteriorly. Immediately behind this last-mentioned whitish line, there is a broad transverse unspotted mark of bright chestnut-brown, which occupies the nape. The back, scapularies, rump, primary coverts, and secondary quill-feathers, are blackish-brown, or brownish-black, with light reddish-brown or dirty brownish-white margins to the feathers. The markings which result, are longitudinal. On the back the black predominates; but on the wing-coverts and secondaries, the reddish-brown is the prevailing colour, and occupies

* "On their first arrival they generally feed on grass seeds, but as the summer advances, they live much on worms, and are then not so much esteemed." *Hearne, l. c.*

† *Fauna Grœnl.* p. 119.

‡ *Travels in Iceland*, p. 341.

the outer vanes of most of the feathers. The two sets of feathers last-mentioned have very slight white tips, scarcely sufficient to produce two transverse white lines on the wings. The flag-feathers have a deep hair-brown colour, and the very narrow margins of all their outer vanes are pale as if worn. Nearly the whole of the outer vane of the exterior wing-feather is white. The tail, which is forked, is of the same colour with the flag-feathers, but the exterior feather on each side is white, with a narrow oval hair-brown spot at its tip. There are no red borders to any of the tail feathers. The belly, vent, and under-tail covertures are white. The flanks are black and white, in patches. Bill, bright yellow, with a brownish-black tip. Feet, brownish-black. Length, 6½ inches. Tarse, 1 inch. Hind toe and claw, 10½ lines. Claw alone, 5½ lines.

The following is the description of a *female* killed at the *same period*:—

The whole dorsal aspect blackish-brown, in some parts verging upon clove-brown, longitudinally spotted or striped with light yellowish-brown, which occasionally approaches to rusty-white. The lighter colour occupies the margins of the feathers, and its proportions vary in different parts. On the head, the dark blackish-brown is relieved by some spots only of the lighter colour. On the nape, and fore-part of the shoulder, on the contrary, the yellowish-brown predominates, and the spots of blackish-brown are small, and confined to the centres of the feathers. On the back, the light-coloured margins of the feathers are nearly worn off, and the blackish-brown again prevails. The tail and the wings, both covertures, and quill feathers, approach to clove-brown in their ground colour, but the narrow exterior margins of all the feathers are rusty-white. These whitish margins are broadest on the covertures and secondaries. The exterior tail-feather on each side, has its whole outer vane and a considerable portion of its inner one near the tip, white. There is also much white on the adjoining feather. The light-coloured band which passes over the eye, and is so well defined in the male, is less distinct and more spotted in the female, at this period. The female has also a large dark-coloured, but somewhat varied spot, (moustache) behind and beneath the eye. The throat, abdomen, and under-tail covertures, are ash-gray. The breast is somewhat rusty, with black spots, and the flanks have longitudinal dark marks. The general appearance of the plumage shews, that at this period the light-coloured margins of the feathers are every where wearing off, and daily allowing more

and more of the dark colours to appear. Tarse, 10 lines. Hind toe and claw, 10 lines.

Hearne states that these birds remain all the winter at Hudson's Bay, but migrate farther north in the spring to breed. It would appear that they rarely go so far south as the United States, for they are not mentioned by Wilson.

They breed in Melville peninsula, and form a nest of the same materials with the snow-bunting, but place it on a grassy or mossy eminence, and not amongst stones. They lay seven eggs.—*Captain Lyon. Parry's Narrative, Second Voyage*, p. 462

7. TETRAO SALICETI. (Temm.) *Willow-grouse.*

Tetrao saliceti. *Temm.* p. 471. *Appendix to Franklin's Journey*, p. 681.
Tetrao albus. *Gmel. Lin. Syst.* i. p. 750.
White grouse. *Arctic Zoology*, ii. p. 308, No. 183.
Willow-partridge. *Hearne's Journey*, p. 411.
Wawpeethœoo. (White bird). *Cree Indians.* Kasbah. *Copper Indians.*
Akkai-diggœuck. (Dual, akkai-degeek.) (Plur. akkai-degeet.) *Esquimaux of the Welcome*
Tetrao albus. *Parry's Narrative, Second Voyage*, p. 323, 378, 384, 385.

THIS is the most common kind of grouse at Hudson's Bay. During the winter they assemble in immense flocks, and frequent low swampy places, near willow thickets. In summer they retire in pairs to open situations to breed. They are more rare in the Barren Grounds, and in the quarters visited by Captain Parry, than the ptarmigan.

The change of plumage of the willow-grouse and ptarmigan, from white in winter to coloured in summer, has given rise to a variety of speculations. Some authors attributing it to the moulting of the birds twice a year, and others considering the alteration of colour to be independent of the annual moulting common to them with other grouse, and to take place in the old feathers, and not by the growth of new plumage. Dr. Fleming, in his Philosophy of Zoology, (ii. p. 22) supports the latter opinion at considerable length, and with much success.

The additional downy feather, which springs from the inside of the quills of all the feathers which cover the body, has been often noticed by writers, but they have hitherto considered this doubling of the feathers to be peculiar to the white plumage, and to be a provision of nature against the severity of

winter. The fact is, that the small interior feather exists equally distinct, although not quite so bushy, in the coloured plumage. In the latter case its colour is bluish-grey, and even in the former case, it has sometimes a slight tinge of the same colour.

The double feathers cover the head, neck, body, and thighs, the proportional size of the inner one, however, varying in different places. The outer and inner wing-coverts and scapulars are also double, the only single feathers being the primaries, secondaries, and tertiaries of the wings, and sixteen of the tail-feathers. Temminck reckons eighteen tail-feathers to the willow grouse. We had an opportunity of examining many specimens, which were killed at Fort Enterprise, in April, 1821, in perfect white plumage. In all these, there were on each side of the tail, seven black feathers, slightly tipped with white, and four intermediate white ones, of equal size and similar shape. Only two of these intermediate ones were single, the other two had, like the superior and inferior tail coverts, the small internal feather springing from their quills.

Mr. M'Gillivray, assistant in the Edinburgh Museum, informs us, that he has found the additional internal feather more or less developed in all the gallinaceæ he has examined, and in many other tribes of birds.

8. Tetrao rupestris. (Sabine.) *Small Northern Ptarmigan.*

Tetrao rupestris. *Sabine. Appendix to Parry's First Voyage*, cxcv.
Tetrao lagopus. *Temminck*, 468.

Several species of grouse appear to have been hitherto confounded, under the name of ptarmigan or *tetrao lagopus*. Captain Sabine met with two kinds in Baffin's Bay and the Arctic Sea, one precisely similar to the Scotch ptarmigan, and for which he has retained the name of *tetrao lagopus;* the other is the one now under consideration, and was that most frequently seen by Captain Parry on the present voyage. Captain Sabine, under the impression that the latter was the *rock-grouse* of Hearne, and consequently of Pennant, has applied that name to it; but the fact is, that it has not hitherto been brought from Hudson's Bay, and if it actually exists there, it is confounded by the natives with the ptarmigan, (*tetrao lagopus*, Sabine, not of Temminck,) which the Crees term *asseence-peetheyoo*, grouse of the barren or rocky districts, to distinguish it from the willow-grouse, which forms the subject of the preceding article. Hearne in his Northern Journey may

have seen Captain Sabine's species, but is not likely to have transmitted any specimens to Mr. Pennant.

A specimen of the *tetrao rupestris* in summer plumage, brought home by Captain Parry, corresponds exactly with an European continental specimen, preserved in Dufresne's collection, now in the Edinburgh Museum, under the name of *tetrao lagopus*, and this is the kind almost always met with in the French and German collections, so that we consider the synonymes prefixed to this article to be correct.

My friend, Mr. James Wilson, whose opinions and observations on ornithological questions carry with them deservedly much weight, permits me to state, that in his journies through Scandinavia, and in his visits to different Northern Museums, he observed two species or varieties of ptarmigan, (with the black mark from the angle of the eye in the males of each, and consequently distinct from the *t. saliceti*,) both of which differed from the *tetrao lagopus*, or ptarmigan of Scotland, in having a more gay and brighter summer dress, with broader and deeper coloured blotches of orange, and less of the fine sprinkling of gray. The smaller kind, a third less in size than the other, but more common, known in Sweden by the name of *sno rissa*, is the kind usually observed in the Museums of France and Italy, and corresponds with the subject of this article. The larger kind observed only in Northern Collections, approaches in size more nearly to the Scottish specimens, but, as has been observed, has a brighter plumage. The Swedish sportsmen say, that the large kind frequents the craggy summits of mountains, and thus resembles in its habits the Scottish bird; while the smaller kind, the *sno rissa*, affects sub-alpine districts, where the birch and other native trees prevail. Further observations and comparisons are required, to enable us to decide, whether the kinds which are here indicated are only varieties or distinct species. It appears to be certain, however, that the subject of this article, by whatever name it shall be hereafter called, is common to the North Georgian Islands and most northern parts of America, and to the Continent of Europe: that the Scottish ptarmigan is by Mr. Sabine's observations, (*Franklin's Appendix*, p. 682,) the most common about Hudson's Bay, but goes as far north as Barrow's Strait; and that a kind resembling the last in size and manners, but of a brighter plumage, is found on the snowy summits of the mountains in the North of Europe.

9. TETRAO LAGOPUS. (Sabine.) *Ptarmigan.*

Tetrao lagopus. *Captain Sabine. Supplement to Parry's First Voyage*, cxcvii. *J. Sabine. Appendix to Franklin's Journey*, p. 682.
Asseenee-peetheyoo. (Barren ground or Rock-grouse.) *Cree Indians.*
Kasbah-yazzeh. *Copper Indians.*
Small white partridge. *Hudson's Bay Traders.*

AFTER what has been said in the preceding article, we have few remarks to make on this bird. Captain Sabine observed it on the southern shores of Barrow's Strait, and Mr. Edwards also saw it on Melville Peninsula, but as no specimens were brought home on the last voyage, it would appear to be much more rare in those quarters, than the *tetrao rupestris*, its principal *habitat* being more southerly.

10. CHARADRIUS PLUVIALIS. (L.) *Golden plover.*

Charadrius pluvialis. *Temm.* p. 535. *Supplement to Parry's First Voyage*, cxcix. *Appendix to Franklin's Journey*, p. 683.
Charadrius apricarius. *Fauna Grœnl.* p. 114. No. 79.
Golden plover, No. 399, and Alwagrim plover, No. 398. *Arctic Zoology*, p. 483. *Hearne's Journey*, p. 429.
Tōodlĕĕ-ārioo. *Esquimaux.*
Golden plover. *Parry's Narrative, Second Voyage, August* 7th, 1821, *June* 29, 1822, p. 265, 435, 446.

THESE birds are very common in America, varying their places of resort with the seasons, from Florida to the most distant Arctic lands; and in their various dresses, and in different places, they are known by a corresponding variety of names, such as black-bellied plover, golden plover, green plover, hawk's eyes, *&c.* They were seen in abundance, during the progress of the expedition. Individuals killed in June and July, and consequently in that state of full summer plumage which characterizes the nominal species of *c. apricarius*, corresponded, with slight variations, to the description given by Temminck; but it is worthy of remark that the black on the upper parts of the body had generally a green reflection, which is lost after the specimen has been kept for some time*. Many killed near the end of August,

* From Mr. EDWARDS' Notes.

agreed with the account given by Captain Sabine * of the young birds, but others, on the contrary, had the mixture of black and white on the abdomen, which is mentioned by Temminck, as being always the case in the young birds †.

After the breeding season in the north is over, the golden plovers frequent the sandy and gravelly banks of the lakes and rivers that flow into Hudson's Bay, and like other birds, before finally emigrating, employ the autumn in getting very fat. In this state they are certainly the most delicious bird in the country, although the residents sometimes prefer to it the little teal (*anas crecca*), which is at the same period in most excellent condition. In September and October they arrive on the shores of the United States, and soon afterwards disappear, retiring still farther to the southward. They are not met with in the interior of that country, nor, as far as Wilson could learn, were they known to breed on the coast. Their principal resort in the breeding season is to the barren grounds, upon the confines of the Arctic Circle, and to the islands that lie to the north of the American continent.

It may be proper to notice here that Temminck, through inadvertence, has quoted Wilson's description and figure, v. 7. p. 41, t. 57, fig. 4, as referring to this bird in its breeding plumage, although, under the article *vanellus melanogaster*, p. 549, he has pointed out Wilson's misapplication of the name, and quoted him aright.

11. Charadrius hiaticula. (L.) *Larger ringed plover.*

Charadrius hiaticula. *Temm.* p. 539, *Greenland Birds*, No. 10, p. 534. *Supplement to Parry's First Voyage*, p. cc. *Appendix to Franklin's Journey*, p. 684. *Faun. Grœnl.* p. 112, No. 78.
Ringed plover. *Arctic Zoology*, ii. p. 485, No. 401.
Ringed plover. *Parry's Narrative, Second Voyage, Aug.* 17th, p. 309.

The specimens brought home accord with Temminck's description, and are exactly represented by Wilson's figure, vii. t. 59, f. 3. The small figure in vol. v. p. 30, t. 37, f. 2, he has himself rejected. It may be thought scarcely worth mentioning, that the orbits of a great number of individuals, killed at Hudson's Bay, in August, were pure yellow, not orange, as stated in Temminck's account of the European birds.

* *Supplement to* Parry's *First Voyage*, p. cxcix. † From Mr. Edwards' Notes.

The ringed plovers assemble, after the breeding season is over, in vast numbers, on the sandy shores of Hudson's Bay between Churchill and Moose factory, and continue feeding there, until the formation of ice upon the beach drives them to a more genial climate.

12. VANELLUS MELANOGASTER. (Bechst.) *Gray plover.*

Vanellus melanogaster. *Temm.* p. 547 *Appendix to Franklin's Journey*, p. 684.
Tringa helvetica. *Forster, Phil. Trans.* lxii. p. 412.
Gray sand-piper. *Arctic Zoology*, ii. p. 477, No 393, and Swiss sand-piper, *Arctic Zoology*, ii. p. 478, No. 396.
Wawpusk-abreasheesh, (white bear bird.) *Cree Indians.*
Tŏŏlĕĕ-ărioo, or Tooglee-ai-ah. *Esquimaux.*

A MALE specimen, killed on the 23rd of June, corresponds exactly with Temminck's description of the breeding plumage; but a female killed on the same day has a considerable intermixture of white, in the parts that are black in the male. The specimens are equal in size, and 11⅛ inches long. In addition to the characters which Temminck gives for distinguishing this species from the golden plover, with some states of which it has been occasionally confounded, the greater size and strength of the bill, mentioned by Wilson, are very conspicuous, when the birds are compared.

The eggs of the gray plover, collected on Melville Peninsula, are of an olive-green colour, with irregular spots of umber-brown, of different degrees of intensity, crowded and running into each other towards the obtuse end.

13. STREPSILAS COLLARIS. (Temm.) *Turnstone.*

Strepsilas collaris. *Temm.* p. 553. *Supplement to Parry's First Voyage*, cc. *Appendix to Franklin's Journey*, p. 684.
Tringa interpes. *Faun. Græn.* p. 109, No. 74
Hebridal sand-piper. *Arctic Zoology*, ii. p. 472, No. 382. *British Zoology*, ii. p. 84. *Hearne's Journey*, p. 427.
Turnstone sand-piper. *British Zoology*, (Ed. 1812, 8vo.) ii. p. 83.
Tăllĭg-wĕĕ-ărioo, or Tellee-goo-ai-eu. *Esquimaux.* Tellee-goo-ak. *Greenlanders*, (Fab.)
Turnstone. *Parry's Narrative, Second Voyage*, p. 241. Whale Birds. *Hudson's Bay Traders.*

THE specimen brought home, is a male killed on the 14th of June at Winter Island. It has the large black spot on the lateral tail-feathers, which is said

to be proper to birds one year old, but its plumage is in other respects perfect, agreeing with Temminck's description of the old male. Fabricius did not meet with this bird in Greenland, but from the descriptions given by the natives, he conjectured it to be an inhabitant of that country. The similarity betwixt the Esquimaux and Greenland names. shews that his conjecture was right.

14. Grus Canadensis. (L.) *Brown crane.*

Grus Canadensis. *Temm. Ornith. Introd.*, p. c. *Appendix to Franklin's Journey*, 685.
Ardea Canadensis. *Latham, Index Ornith. Supp.* i. p. 299. *Synops.* ii. p. 675. *Forster, Philos. Trans.* lxii. p. 409.
Brown Crane. *Arctic Zoology*, ii. p. 443, No. 340. *Hearne's Journey*, p. 423.
Ardea Canadensis. *Parry's Narrative, Second Voyage*, p. 442, 448.
Ochee-chak. *Cree Indians.* Tattēē-lēē-ārŭok. *Esquimaux.*

The specimen received, was obtained by Captain Lyon, near Igloolik on the 25th of June, and corresponds in size and plumage with the description in Arctic Zoology. It is considerably smaller than the one described by Mr. Sabine in the appendix above-cited; the bill is an inch shorter, and the plumage of its body has a deep rusty tinge, whilst that of the latter was ash-coloured. Hearne says, that the Brown Crane never has more than two young, and that it goes farther north than the Hooping Crane, which latter remark, as far as regards the sea-coast, would appear to be confirmed by the circumstance of the Hooping Crane not having been seen by any of Captain Parry's people. Captain Franklin's party observed both species in lat. 62°, but neither of them were seen higher on their line of route, which lay in the middle of the continent.

Both species are edible, and when in good condition, resemble the flesh of the swan in taste.

15. Tringa variabilis. (Meyer,) *Dunlin.*

Tringa variabilis. *Temm.* p. 612. *Supplement to Parry's First Voyage*, p. cc. *Appendix to Franklin's Journey*, p. 686.
Tringa alpina. *Greenl. Birds*, p. 384, No. 9.
Dunlin (summer). *British Zoology*, ii. p. 92. *Arctic Zoology*, ii. p. 476, No. 391.
Purre (winter). *British Zoology*, ii. p. 94, t. xvi. *Arctic Zoology*, ii. p. 475, No. 390.
Seekee-arak-seĕ-oo. *Esquimaux.*

These birds breed on Melville Peninsula. Their eggs are 15½ lines long, and 11½ lines at their greatest transverse diameter. They have an oil-green colour,

with very irregular spots of different sizes and shades of liver-brown. These spots are confluent at the obtuse end, where they form a large clouded blotch. One end of the egg is very much more obtuse than the other.

16. TRINGA MARITIMA. (Brunn.) *Purple sand-piper.*

Tringa maritima. *Temm.* p. 619. *Greenl. Birds*, p. 532, No. 7. *Supplement to Parry's First Voyage*, p cci.
Tringa striata. *Faun. Grœnl.* p. 107, No. 73.
Purple sand-piper, (tringa nigricans.) *Montague, Dictionary and Supplement*
Selninger sand-piper *Arctic Zoology*, ii. p. 480. *British Zoology*, ii. p. 80, No. 8.
Siggee-āree-ārioo? *Esquimaux.*

NINE or ten of these birds were shot on the rocks at low-water mark, on Winter Island, on the 10th of June. The two specimens received are male and female. The bill of the latter measures 16 lines, whilst that of the male measures only 13 lines. Mr. Edwards remarked, in examining a number of individuals, that the females were the largest, and had longer bills in proportion. In the recent specimens, the bill was black, with a yellow tint at the base. The plumage of those received, corresponds with Temminck's description of the summer bird, except that the margins of the dorsal feathers exhibit more of the ferruginous colour than of the white, and that the black has more of a brown hue than of a violet.

The eggs of this bird have a pyriform shape, tapering very much towards the small end, and being extremely obtuse, almost flattened at the other. Their length is 16½ lines, and greatest transverse diameter 12 lines. Their colour is yellowish-gray, interspersed with small irregular spots of light hair-brown, most crowded towards the obtuse end, and rare at the other. Fabricius describes the eggs well, and says, they are from four to six in number, and deposited in a tuft of soft roots of grass, gathered together without any appearance of art.

17. TRINGA MINUTA. (Leisler.) *Little sand-piper.*

Tringa minuta. *Temm.* p. 624. *Appendix to Franklin's Journey*, p. 686.
Little sand-piper, tringa pusilla, (non tamen, Lin.) *Montague, Suppl. Ornith. Dict.* cum tabula.

A SINGLE specimen of this bird, in the autumn moult, was brought home by Mr. Edwards.

18. TRINGA CINEREA. (L.) *Knot.*

Tringa cinerea. *Temm.* p. 627. *Greenl. Birds*, p. 533. *Supplement to Parry's First Voyage*, p. cci.

Tringa cinerea, grisea, canutus, islandica, nævia, australis. *Gmel. Syst.* p 673, 682, 681, and 679. Sp. 25, 41, 15, 24, 40 and 39.

Red sand-piper, (No 392,) ash-coloured, S. (No. 386.) *Arctic Zoology*, ii. p. 476, 474.

Knot. *Montaque, Dict.* and *Supp.*

Knots and sand-pipers. *Parry's Narrative Second Voyage, Aug.* 22nd, 1821. p. 241, 435, 446, 462.

THE specimen received, is a male killed in the Duke of York's Bay, on the 17th of August, and corresponds with Temminck's description of the yearling before moulting, and with Wilson's figure in *Amer. birds.* v. 7, t. 57, f. 2.

The knots were observed breeding on Melville Peninsula, by Captain Lyon, who tells us, that they lay four eggs on a tuft of withered grass, without being at the pains of forming any nest. (*Narrative*, p. 462.)

19. PHALAROPUS PLATYRHINCHUS. (Temm.) *Flat-billed phalarope.*

Phalaropus platyrhinchus. *Temm.* p. 712. *Greenl. Birds*, No. 12, p. 536. *Supplement to Parry's First Voyage*, cci.

Gray phalarope, (No. 412,) Plain-phalarope, (No. 415.) *Arctic Zoology*, ii. p. 494, 495.

Phalarope. *Parry's Narrative, Second Voyage, June* 18, 1821. *June* 29, 1822. p. 462.

THE specimen received is a male in full summer plumage, in which state the trivial name of *red* is as applicable to it as to the *P. hyperboreus*, and Latham, misled by the colour, has actually described it as the female of the latter.

The *phalaropes* swim well and gracefully, and were seen on the present voyage upon the sea out of sight of the land. We have often noticed them on the small lakes, in the interior of America, unwilling to take wing when disturbed, and preferring to swim out of the reach of danger. In this respect they differ totally from the *tringæ*, with which they were long classed.

They lay four eggs, upon a small tuft of grass. (*Captain Lyon's Narrative*, p. 462.) The eggs have an oil-green colour, and are very much covered with irregular spots of dark umber-brown. Towards the obtuse end of the egg, the spots run into each other, and almost hide the ground colour.

20. STERNA ARCTICA. (Temm.) *Arctic tern.*

Sterna Arctica. *Temm.* p 742. *Supplement to Parry's First Voyage*, p ccii. *Appendix to Franklin's Journey*, p. 694

Sterna hirundo. *Greenl. Birds*, No. 17, p. 542.

Black heads *Hearne's Journey*, p. 432 ?

Tern *Parry's Narrative, Second Voyage, June* 29th, 1822, p. 254, 268, 283

DESCR. of a *male* in full *breeding plumage*, killed on Winter Island on the 24th of June, 1822.

Forehead, crown, and nape, brownish-black; posterior part of the neck, back and wings, pearl-gray, approaching to light bluish-gray. Tail and tail-coverts, white, but the exterior tail-feather on each side has its outer vane coloured blackish-gray; there is also a slight tinge of this colour on the adjoining feather. The flag feathers are of the same colour with the mantle, except that the first has its outer narrow vane of a blackish-gray colour. The inner vanes of all the primaries are longitudinally half gray, half white. Their tips are entirely gray, approaching to blackish-gray. Most of the secondaries are tipped with white. The throat, cheeks, and fore-part of the neck, are white. The breast, abdomen, and flanks, are coloured like the mantle. The inner wing covertures, vent, and under surface of the tail, are white. The under surfaces, however, of the flag and exterior tail feathers, have more or less of a grayish tint. The tail is very much forked, the exterior feathers being much longer than the others, and passing the tip of the folded wing, about a quarter of an inch. The bill and feet have a scarlet colour in the recent specimen, but acquire more or less of a lake hue in drying. Length fifteen inches. Length of the upper mandible measured on the mæsial line, 16½ lines. Measured to angle of mouth, two inches. Tarse, seven lines. Middle toe with the claw, one inch.

A *female*, killed on the same day, differed, in having the shade of gray on the breast and abdomen a little lighter and approaching to ash-gray, in the dark gray margins extending to three of the outer tail feathers of a side, and in the upper mandible being blackish towards the tip. The length of the bill in this specimen was fifteen lines, or when measured to the angle of the mouth, twenty-one lines. Its tarse was very nearly seven lines. Its total length was fully equal to that of the male specimen, or fifteen inches.

Captain Sabine describes the *young bird*, of the 8th July, in the appendix above-quoted.

One thirteen inches long, killed at York Factory on the 28th of August, had its forehead white. Crown of the head and upper eyelid black. Back and wings bluish-gray, clouded with yellowish-gray. Tips of the flag, and secondary feathers whitish. Ventral aspect entirely white. Bill and legs orange. Wings passing the tail a little. In all other respects like a mature bird. Tarse six lines.

It will appear, upon a review of the above descriptions, that some of the characters pointed out by Temminck as distinguishing this species from the *st. hirundo* do not hold good in all cases, namely those which relate to the colour of the point of the bill, of the fore part of the neck and throat, and of the proportion of white on the belly. The rather smaller bill, shorter tarsus, and longer tail, of the *st arctica*, seem to be the only constant differences.

The *sterna arctica* having been hitherto confounded with the *st. hirundo*, it is uncertain whether both are inhabitants of Hudson's Bay*. That the latter is found in the United States, is evident from the short wings, and comparatively long tarse, exhibited in Wilson's figure (*Am. birds*, 7, p. 67, t. 60, f. 1,) and from the assurance of Temminck, that he has American specimens which do not differ from the European ones. A tern with a slight smoke-gray tinge on the breast, but the rest of the ventral aspect pure white, was killed by Captain Franklin's party, near the verge of the Arctic Circle; one the 5th of July, whilst hatching upon two eggs. This is the livery of the *st. hirundo*, but the length of the tarse was unfortunately omitted to be noted, so as to decide the matter.

The Arctic terns were seen in great abundance on the present voyage, and were found breeding on Seeowak or Tern Island. The nest, as noted in the Narrative (p. 283,) consisted merely of a depression in the sand, and contained generally two, very rarely three eggs. The colour of the eggs varied, even in the same nest. Those brought home are of a pyriform shape, are very obtuse at one end, and sharp at the other, and marked with many irregular umber-brown spots of different degrees of intensity. Some of the eggs had a light yellowish-brown ground colour, others a bluish, or greenish-gray.

These terns, like the common species, are very clamorous when any one approaches their nests, and strike furiously within an inch or two of the intruder's head.

* Forster, in *Phil. Trans.*, lxii., describes a tern with a tail still shorter than that of the *st. hirundo*, *British Zoology*. This cannot be the *st. arctica*.

21. LARUS GLAUCUS. (Brunn.) *Glaucous gull.*

Larus glaucus. *Temm.* p. 757. *Greenl. Birds*, No. 19, p. 543. *Supplement to Parry's First Voyage*, p. cciii. *Faun. Grœnl.* p. 100, No. 64.
Burgermeister. *Marten's Spitzb.* p. 84, t. L, f, e.
Glaucous gull. *Arctic Zoology*, ii. p. 532.
Iceland gull. *Edmonston in Wernerian Trans.* iv. (part 1, p. 176, 182. *Bewick's British Birds, Supplement pl.*
Now-idioke. *Esquimaux.*
Larus glaucus. *Parry's Narrative, Second Voyage, Sept.* 13.

THERE is a young male of this species in the collection, killed on September 26th, at the entrance of Lyon's Inlet.

Length twenty-nine inches. Wings as long as the tail. Bill two inches long above, and three to the angle of the mouth. Length of tarse thirty-two lines. Weight 2½lbs.

22. LARUS ARGENTATUS. (Brunn.) *Black-winged Silvery gull.*

Larus argentatus. *Temm.* p. 764. *Supplement to Parry's First Voyage*, p. cciv. *Appendix to Franklin's Journey*, p. 695.
Silvery gull, (winter.) *Arctic Zoology*, ii. p. 533.
Herring gull, (summer.) *Arctic Zoology*, ii. p. 527, No. 452. *British Zoology*, ii. p. 181, No. 5, t. 23.
Now-ya. *Esquimaux.*
Silvery gull. *Parry's Narrative, Second Voyage*, p. 61, *Sept.* 13, 1821, p. 254.

A MALE and female, in mature breeding plumage, killed at Winter Island on June 29th, 1822, are in the collection. The former measures two feet, and has a tarse 2⅓ inches long; the latter is two inches shorter, and has a tarse 2¼ long. The wings, in both specimens, pass the tail about an inch; they have the usual black markings on the flag-feathers, and accord in all respects with Temminck's description of the breeding plumage, except that he does not notice the white colour of the smallest covertures, forming a white border to the upper part of the wing.

Of six individuals examined by Mr. Edwards, in June, July, and September, the length varied from twenty-three to twenty-five inches, and the length of the tarse from twenty-seven to thirty-one lines, averaging twenty-nine lines.

The silvery gull, (*Larus argentatus*) *Greenl. Birds, No.* 20, p. 546, brought home on the former voyage, and which wants the black markings on the wings, is considered by Temminck as a variety proper to the polar countries.

A specimen of it, in the Edinburgh Museum, was brought from Greenland by Captain Scoresby. It is probable that a further acquaintance with it will confirm Captain Sabine's opinion, of its being a distinct species. The wings are shorter than in the black-winged kind, being only equal with the tail; a close comparison detects a slight difference in the form of their bills, and the young are said to differ in the colours of their plumage.

23. Larus tridactylus. (Lath.) *Kittiwake.*

Larus tridactylus. *Temm.* p. 774. *Greenl. Birds*, p. 549. *Supplement to Parry's First Voyage*, p. ccv. *Appendix to Franklin's Journey*, p. 695.
Kittiwake, (No. 456) and Tarrock *Arctic Zoology*, ii. p. 529, 533.
Kutge-gehef. *Marten's Spitzb.* p 82, t. N, a.
Kittiwake, (larus rissa.) *Parry's Narrative, Second Voyage, June 7*, 1821.

24. Larus Rossii. (Mihi.) *Cuneate-tailed gull.*

Undescribed gull. *Parry's Narrative, Second Voyage*, p. 449.

Descr. Head and tail pure white; the neck above and below, the breast, and the inferior parts of the body, are, in the recent bird, deeply tinged with peach-blossom red, which disappears some months after the specimen is mounted, leaving a pure white. There is a distinct collar of deep brownish-black round the middle of the neck, four or five lines broad above and narrower below. The back, scapularies, and wings both upper and under surface, have a clear pearl-gray colour (*cendrè-bleuatre pur* of Temm.) The outer web of the first primary is deep blackish-brown, from its base to within 1½ inch of its tip, which is of the colour of the rest of the wing, and the tips of the scapularies, and of the inner webs of some of the secondaries, are whitish.

The bill is black, slightly margined with red at the angle of the mouth. It is more slender and smaller than in its congeners. The upper mandible is slightly curved and compressed towards the point, and the lower one has a corresponding droop at the end, but is otherwise nearly straight. The salient angle beneath is not very evident, and the bill altogether is less strong than in other gulls. The nostrils are longitudinal slits, occupying about one half of that part of the mandible which is uncovered with feathers. The length of the bill measured above is nine lines, and to the angle of the mouth fifteen lines. The tarse is thirteen lines long, and rather stout, and with the feet is of a vermilion colour. The middle toe, including the claw, is nearly

fourteen lines long. The thumb is very distinct, and has a claw nearly as large as that of the outer fore-toe.

The tail is decidedly cuneate, the central feathers being about five inches long, and the others becoming gradually shorter, as their situation is more external. The outermost are above an inch shorter than the central ones. The wings surpass the longest tail-feather about one inch.

The length from the tip of the bill, to the end of the middle tail-feather, is about fourteen inches.

Of the manners of this species we know nothing. Two individuals only were seen during the voyage, both killed in the month of June, at Alágnak. The first killed by Mr. now Lieutenant Ross, is here described, and under a specific name adopted in compliment to his exertions for the advancement of ornithology, frequently referred to in the Narrative. The second one, killed by Mr. Sherer, "differed only in having the exterior wing covert of the same blackish colour, with the outer web of the first primary *."

Until further specimens are procured, it would be premature to attempt to frame a specific character, but the distinguishing marks of the one received may be thus summed up: Larus (*Rossii*) capite caudâque cuneatâ albis, dorso alisque caudam superantibus griseis, pectore abdomineque roseis, rostro debiliori nigro, tarso unciali pedibusque miniatis.

25. LARUS SABINII. (J. Sabine.) *Fork-tailed gull.*

Larus Sabinii. *Temm. Intr.* cviii. *Linn. Trans.* xii. p. 520, t. 29. *Greenl. Birds*, No. 2?, p. 551. *Supplement to Parry's First Voyage*, p. ccv.
Xema Rossii. *Leach in Ross's Voyage to Baffin's Bay.*
Erkēēt-yūggĕē-ārioo. *Esquimaux.*
Larus Sabinii. *Parry's Narrative, Second Voyage*, p. 254, 301.

MANY specimens, male and female, of this bird, were procured in June and July, 1822, at Winter Island and Aulitiwick, which correspond minutely with the description given by Mr. Sabine in the *Linnean Transactions* above quoted. Mr. Edwards remarked that, when newly killed, they had all more or less of a delicate pink blush on the abdomen. The winter changes of plumage which this bird undergoes, are still unknown. A flock of them was seen in the end of June, accompanied by the *Lestris parasiticus*, and on the

* Mr. EDWARDS' Notes.

5th of August, another flock was seen flying high, as if migrating. Captain Sabine, in honour of whom, as its first discoverer, this bird has been named, informs me, that he killed a pair at Spitzbergen, on his late voyage. This decides its claim to be enumerated amongst the European birds. The Spitzbergen specimen is in full summer plumage, and corresponds with the description in the *Linnean Transactions* quoted above.

26. LESTRIS POMARINUS. (Temm.) *Pomarine lestris.*

Lestris pomarinus *Temm.* p. 793. *Supplement to Parry's First Voyage*, p. ccvi.

A MALE specimen, killed at Igloolik on the 27th of June, was received. It measures 18½ inches in length, or when the long tail-feathers are included 20½ inches, and corresponds with Temminck's description of the old bird, except that there are only some slight traces of the collar of brown spots on the breast, and that the vent-feathers and under tail coverts are uniform blackish-brown without spots; cheeks black. Tarse two inches long. The long tail feathers are twisted towards their points, so as to have their vanes obliquely applied to each other.

The following particulars respecting a *young bird* of the *preceding year*, shot on the 10th of June, are extracted from Mr. Edwards' notes. Length 18½ inches, to which 1½ inch is to be added for the excess of the long tail-feathers. Extent 48½ inches. Weight twenty-two ounces. Tarse twenty-four lines long, of a bluish-gray colour. Toes and webs, black. Nape of the neck, white, with a yellowish-brown tinge; flanks and under tail coverts barred with dark brown. The webs of the two middle tail feathers preserve their breadth to their extremities, which are rounded.

27. LESTRIS PARASITICUS. (Boie.) *Arctic lestris.*

Lestris parasiticus. *Temm.* p. 796. *Greenl. Birds*, p. 551, No. 24 *Supplement to Parry's First Voyage*, p. ccvi.
Struntjager. *Marten Spitzb.* p. 87, t. L, d
Catharacta parasitica. *Faun. Grœnl.* 103, No. 68.
Arctic gull. Black-toed gull. *Arctic Zoology*, No. 459, p. 530, No. 460, p. 531.
Is-sû-nak. *Esquimaux.*
Boatswain. *Parry's Narrative, Second Voyage, June* 29, 1822, p. 279.

A MALE and female were obtained on the 17th of June, in the Duke of York's Bay, agreeing exactly with each other in the colour of their plumage, but differing from Temminck's description in the forehead, crown, and occiput

having a dark brownish-black colour; in the neck having the yellowish hue of the same parts in the *l. pomarinus;* and in the purplish-gray of the under tail covertures extending forwards past the vent to the posterior part of the abdomen. The male measured fifteen and the female sixteen inches, the middle tail-feathers in both having a further length of 6½ inches. One shot by Mr. Griffiths on the 16th of June, had the long tail-feathers, projecting 8½ inches farther than the rest. Mr. Edwards has noted a number of individuals killed between the 19th and 30th of June, 1822, as having the abdomen purplish-gray, with various intermixtures of white. In one instance, the white was confined to a few streaks. Captain Franklin's party observed these birds hatching in considerable numbers on the banks of the Copper-Mine River, in the beginning of July, and the greater part of them had dark abdomens.

A young bird, taken before it had escaped from the nest, and still covered on the head and breast with blackish-gray down, has all the dorsal aspect blackish-brown, with narrow light yellowish-brown margins to the feathers. The wings and tail are brownish-black without spots, but slightly tipped with light brown. The feathers on the belly are blackish-brown, barred transversely with dull white. The legs and posterior part of the webs and toes are partly of a pale dull yellowish colour.

The mode by which the *lestris* obtains its food on the sea-coast through the labours of the other gulls, is well known; but in the interior of the country, it caters for itself, in other and less parasitical ways.

Anas.

The arrival of the birds of this genus in the fur countries, marking the return of spring, is an event of great importance to the natives, as it affords them a supply of food at a season when the moose and deer hunting is impeded by the floods of melting snow. The larger species, or geese, have been principally attended to, and are observed to follow determinate routes in their progress northward, and to halt regularly at certain stations. Their return in autumn is also by passes well known to the natives, but not always in the same line with their spring movements. "Actuated in the beginning of the season by an impulse which hurries them to the breeding stations, they remain at their resting-places only long enough to admit of the country to the northward being properly thawed for their reception; but during these rests, which are seldom prolonged beyond eight or ten days, they become very fat, although on their first arrival they are always lean. Their move-

ments to the northward are sometimes premature, and after having left a station, they occasionally return to it for a few days. Such an event is always followed by cold frosty weather, or severe snow-storms. When they return in autumn, their migrations being more exclusively regulated by the supplies of food they can obtain, their halt in the marshy districts through which the Saskatchawan, and its continuation, Nelson's River, flows, and on the low shores of the southern parts of Hudson's Bay, is more considerable, and is terminated by the freezing of the marshes. This period forms the principal *goose-hunt* of the Crees, who are the only natives that frequent those swampy districts. In the *barren-grounds*, on the other hand, frequented by the Northern Indians, or Chepewyans, the spring goose-hunt is the most productive.

The only geese seen in numbers in the *interior* of the country, are the Canada-goose, (*anas Canadensis,*) the laughing-goose, (*anas albifrons,*) and the snow-goose, (*anas hyperborea.*) The distinct notes of these three species are well imitated by the Indians, who thus are very successful, in the spring, in bringing them within gun-shot. In the autumn the geese do not so readily answer the call, and it is necessary that the sportsman should conceal himself, and use some dead birds as a decoy.

The Canada-goose, termed by the Canadian voyagers *l'outarde**, and by the Crees *neescah*, arrives first of the three species just mentioned. It breeds every where throughout the Hudson's Bay territory, and was observed, in the middle of July, on the Copper-Mine River, not far from its debouchure, accompanied by its newly-hatched young. The cry of this species is imitated by a nasal repetition of the syllable *wook*, or as Wilson writes it *honk*.

The following table of the arrival of this species in different parallels of latitude in the interior of the country, is derived chiefly from the journals kept by the traders.

Engineer Cantonment.	Lat. 41½°		22nd of February †.
Cumberland House.	,, 54°	from the 8th to the	12th of April.
Athabasca Lake.	,, 59°	about the	20th-25th of April.
Slave Lake.	,, 61°	,, ,,	1st-6th of May.
Fort Enterprise.	,, 64° 30′	,, ,,	12th-20th of May.

* This is the bustard of Messrs. Jerome and De la Poitries, who have been so much censured by Hearne, for asserting its existence. See *Journey to the Northern Ocean*, p. 417.

† In Long's *Expedition to the Rocky Mountains*, the great migration of geese is stated to commence at Engineer Cantonment, in lat. 41½° on 22d February, and to terminate at the latter end of March.

The results of registers for various years kept at Fort Churchill, on Hudson's Bay, lat. 59°, give the 27th of April, and 14th of May, as the earliest and latest arrivals of different seasons. Their eggs have been found as early as the 15th of May. They collect in the marshes of that neighbourhood in some autumns as early as August 16th, and depart about September 10th, rarely continuing until October 10th, which is considered as a very late *fall.*

The other two species seen in the interior, arrrive in separate flocks, generally about six or eight days after the Canada geese. One of these, the *laughing-goose,* keeps the middle parts of the continent in its migrations, and is rarely seen on the coast of Hudson's Bay. Its breeding station is to the northward even of the resorts of the snow-goose, and is still unknown to Europeans. The note of this bird has some resemblance to the laugh of a man, and from this its name has been derived, and not as Wilson *(Am. orn.)* supposes, from the grinning appearance of its mandibles. The Indians imitate its cry by moving the hand quickly against the lips, whilst they repeat the syllable *wah.*

The *snow goose,* in its migration northwards, is seen both in the interior, and on the sea-coast, and in numbers exceeding the other two. It forms more particularly the subject of the following article.

The brent goose, (*anas bernicla*) also particularized afterwards, is found only on the coast of Hudson's Bay; and the barnacle, *(anas leucopsis)* and the bean-goose, (*anas segetum*) the remaining two species of geese known to visit those countries, are rarely seen, being accidental visitors.

The *swans* arrive in the fur countries still earlier than the Canada-goose, and frequent the eddies under water-falls and other spots of open water, until the rivers and lakes break up. They are seen both in the interior and on the sea-coast, sometimes in small flocks, but more frequently in pairs.

Of the smaller birds, or ducks, that constitute the bulk of the genus *anas,* there are about twenty-four species known in the Hudson's Bay fur-countries, only three of which were seen by our navigators. Two of these three, the eider and king ducks, confine their visits to the sea-coast; but the third, the long tailed duck, (*anas glacialis*) is seen also abundantly in the interior, on its passage north.

28. ANAS HYPERBOREA. (Gmel.) *Snow-goose.*

Anas hyperborea. *Temm.* p. 816.
Anas nivalis. *Forster, Phil. Trans* lxii. p. 413.
Snow-goose. *Arctic Zoology*, p. 549, No. 477. White goose. *Hearne's Journey*, p. 439.
Wè-wè-oo or wapow-wè-oo. *Cree Indians.* Kangokh (plur. kang-oot.) *Esquimaux.*
Wavey. *Hudson's Bay Traders.*
Anas hyperborea. *Parry's Narrative, Second Voyage, June 24th*, 1823, p. 487, 462.

WHITE, except the ten first quill feathers, which are brownish-black, fading at the tips into umber-brown. Their shafts all white. Crown of the head, slightly tinged with dirty reddish-brown. Irides dark hair-brown. Margin and inside of the mouth black. Bill, feet, and orbits, aurora-red.

The above is a description of this goose, as killed near Fort Enterprise, in lat. 65°, on its way to the breeding-places.

A female killed at Igloolik, on June 28th, and consequently in the height of the breeding season, differed, in wanting the brown tinge on the crown of the head, but in having it on the fore-head, cheeks, throat, part of the neck underneath, and very slightly on the middle parts of the abdomen. The primary wing covertures are bluish-gray, with blackish-brown shafts. The middle tail-feathers are much worn, and the long scapularies have almost entirely lost their vanes, the naked shafts alone remaining. Length thirty-one inches; of tarse three inches; of bill, measured on the mœsial line to the feathers of the forehead, two inches three lines; or when measured to either of the angles which recede towards the eye, two inches seven lines; to the angle of the mouth two inches five lines.

The *young*, until they attain their fourth year, are said to wear a plumage so different, that they have been described as a distinct species, under the names of

Anas cœrulescens. *Gmel. Syst.* i. p. 513. *Lath. Ind. Orn.* ii. p. 836.
Blue-winged goose. *Arctic Zoology*, ii. p. 547, No. 474. *Lath. Syn.* vi. p. 469.
Blue-goose. *Hearne's Journey*, p. 441. *Forst. Phil. Trans.* lxii.
Cath-catoo wè-wè-oo. *Cree Indians.*

IF these birds are really, as the most eminent ornithologists of the present day suppose them to be, the young of the snow-goose, they keep themselves very much apart from their parents, take a different route on their way southwards from the breeding-places, and do not return to the very high

latitudes until the fourth year afterwards, when a complete change has been operated upon their plumage. According to Hearne, they are numerous at Albany Fort, in latitude 51°, not common at York Factory in latitude 57°, and seldom seen to the north of Churchill in latitude 59°. Captain Franklin's party, during their progress though the fur countries, had opportunities of seeing immense flocks of snow-geese, not only at Cumberland House, in latitude 54°, at Slave Lake, in latitude 60°, and at Fort Enterprise, nearly in latitude 65°, performing their migrations during three successive springs, but also saw them moulting, and unable to fly, upon the shores of the Arctic Sea, in the month of August, and again migrating to the southward, in the months of September of two successive years, yet they were always accompanied by coloured individuals. Hearne, whose opportunities of observation embraced many years, says, that the blue-goose is often seen leading a flock of white ones. He must be understood, however, as is evident from his previous remarks, to refer principally to the southern parts of the fur countries, where alone the blue geese are common.

The snow goose breeds on the coasts and islands of the Arctic Sea, and arrives in the Hudson's Bay countries, on its passage thither, a few days later in the spring than the *A. canadensis*. Its eggs are a little larger than those of the eider duck, of a most regular ovate shape, one end being a little more obtuse than the other, three inches one line long, and two inches one line across at the greatest transverse diameter, which is situated rather more than one-third of the whole length from the obtuse end, and of a yellowish-white colour.

The Cree Indian term, *we-we-oo*, is an attempt to express the peculiar note of this animal, and which the native hunters imitate so exactly, that in the spring they can often decoy the same flock many times within gun-shot. When fat, the snow-goose is much prized as an article of food in the fur countries, and is considered as more delicate than the Canada-goose.

By the end of August the moulting and breeding season being finished in their Arctic retreats, the snow-geese generally take their flight to the southward, with the first northerly or north-west gale of wind, which at that season is often accompanied with heavy snow. They fly chiefly in the night time, and the length of their flight would appear to be regulated, in some measure, by the distance to which the storm extends, because a fall of snow prevents them from obtaining the berries of the *Empetrum nigrum*, which form a chief article of their food at that season. They were observed by Captain Franklin's party in 1821, on the 4th of September, in latitude 66° 30′

on the *barren grounds*, feeding in the day-time on the margins of small lakes, and in such numbers as to whiten the ground for miles together. Their flight to the southward lasted for two or three nights, and was immediately succeeded by a severe storm, and the snow which then fell remained on the ground for the rest of the winter. On the preceding year they had passed Fort Enterprise in latitude 64° 30′ on the 13th, 14th, and 15th of September. In their spring migrations through the interior, they may be stated to reach latitude 54° on the 15th of April, latitude 59° on the 25th of April, latitude 64° on the 20th of May, and their breeding stations in latitude 69°, by the beginning of June.

29. Anas bernicla. (L.) *Brent-goose.*

Anas bernicla. *Temm.* p. 824. *Greenl. Birds*, p. 558, No 45. *Supplement to Parry's First Voyage*, ccvii. *Appendix to Franklin's Journey*, p. 698. *Faun. Græn.*, p. 67, No. 41.
Brent-goose. *Arctic Zoology*, ii. p. 551, No. 478. *Hearne's Journey*, p. 440.
Wee-tha-may pawew. *Cree Indians.* Neer-gluk, or Neerlook *Esquimaux.*
Brent. *Parry's Narrative, Second Voyage*, p. 304, 435, 448, 462. (Nerdlek. *Greenlanders.*)

Two varieties of this bird were observed by our voyageurs. The following description is taken from a *female* killed on the 21st June, and consequently in the height of the *breeding season.* It agrees sufficiently with the ordinary state of the summer plumage of the brent-goose of authors, and is introduced here principally to contrast with the variety which follows, and also to show the first appearance of moulting, &c.

Head, neck, greater part of the breast, and primary and secondary wing-feathers brownish-black. The black terminates in an even line, which surrounds the upper part of the shoulders and breast, on a level with the more anterior part of the folded wing. The black on the ventral aspect of the neck is a little tarnished, by the very narrow margins of most of the feathers being of a grayish-black colour, and an irregular spot is formed on each side of the neck, by a few feathers tipped with white. The back, scapularies, and wing covertures, are of a colour intermediate between light liver-brown and clove-brown, each feather being surrounded by a margin of yellowish-gray. Towards the root of the tail, however, the colour is nearly uniform, their being no gray-margins. The tail covertures, which usually form a white band across its root, have dropped out, and the tail feathers themselves have entirely lost their vanes. There is a large white patch, however, running up from the vent, on each side of the rump, which

is visible from above. The feathers of the abdomen are yellowish-gray, fading at their margins into yellowish white*; on the flanks there are alternate transverse bars of bluish-gray, and tarnished white, the latter colour occupying the margins of the feathers. The vent feathers are white, and the linings of the wings clove-brown. The under tail covertures have fallen out. Bill and feet black. Length of bill, measured along the ridge, 14 lines. Tarse 28 lines. Middle toe and claw 26 lines. Total length from end of the bill to the tip of the tail, 23½ inches.

Captain Sabine, who observed the brent-geese breeding in great numbers on the islands of the Polar Sea, remarks, in the supplement cited above, that the colours of the male are more vivid, in the height of the season, than those of the female, but makes no mention of any other difference in the plumage, so that the bird referred to in the following description is to be considered as a variety, and not as the male in his ordinary breeding-dress, notwithstanding the opinion of the Esquimaux to the contrary.—(*Narrative*, p. 435.)

ANAS BERNICLA. *Varietas*, β.

Bernacle-geese. *Parry's Narrative*, p 135. Neerlook, (male.) *Esquimaux.*

A KIDNEY-shaped white patch (like that of the *A. canadensis*) occupies the throat and cheeks, and extends upwards behind the eyes. The under eye-lid is whitish, but there is a narrow black line betwixt it and the white patch just mentioned. There are also a few small white feathers above, and rather before, the eye. The rest of the head and neck are velvet black. This black colour does not encroach upon the breast, and as in the female above described, but ceases about four inches from the nearest part of the folded wing, or just where the neck begins to swell out. There is no white patch on the sides of the neck. The general arrangement and tints of colour on the dorsal aspect are similar to what is mentioned in the description of the preceding specimen, but the yellowish gray colour occupies a broader portion of the margins of the scapularies and wing-coverts. The tips of the flag and secondary feathers are much faded, and the vanes of the latter are considerably worn. The tail feathers are not worn as in the female, and have a brownish-black colour with faded extremities. A single row of white covertures form a white band across its root; the shoulders are coloured like

* This agrees well with Fabricius's description in *Faun. Grænl.*, but differs from Temminck's.

the back. The breast is yellowish-white. The abdomen and flanks have the same colours as the female above-mentioned, but they are a little lighter, and the white about the vent is more extended. Length 26 inches.

This bird differs from the usual state of the *A. bernicla*, in having the white patch on the throat and cheeks, in wanting the white mark on the neck, in the base of the neck being coloured superiorly like the back, and in the whole breast being whitish. The ridge of the upper mandible is a little flatter, broader, and about two lines longer, than in the female *A. bernicla*.

The plumage bears no resemblance to that of the *A. leucopsis;* there is none of the bright ash-gray, which is to be observed on the dorsal feathers of the latter, succeeded by black bands, and these again by light-coloured tips. The bill is also larger than that of the *A. leucopsis*.

The specimen here commented upon was killed, with several others precisely similar, out of a flock on the 19th of June. Another was killed on the 9th of July, differing only in the colours being in general darker, and the plumage more worn. These were all males. The Esquimaux consider them as the males of the *A. bernicla*, which during the breeding season keep in separate flocks. The specimens brought home have the appearance of full plumaged birds, and differ much from the young of the *A. bernicla*, as described by Temminck; that it is not the common plumage of the male in the breeding season, we have the authority of Captain Sabine above referred to.

The brent-goose breeds, according to Fabricius, in the most remote islands of Greenland. Barentz found them in vast numbers on the coast of Spitzbergen, sitting on their nests. Hearne states them to visit Hudson's Bay in prodigious flocks, on their route to the southward, from their breeding quarters on the Arctic Sea, and he remarks that they always follow the line of coast. They are not seen in the interior, and their route in the spring he says is unknown. Their nests were not seen on the present voyage. On August the 11th, they were seen in large flocks, and it is probable that they were preparing thus early for their migration to the southward. Hearne says that they arrive at Churchill late in August.

30. Anas cygnus. (L.) *Wild Swan.*

Anas cygnus *Temm.* p. 828. *Supplement to Parry's First Voyage*, p. cvii. *Appendix to Franklin's Journey*, p. 697.
Whistling swan. *Arctic Zoology*, p 541, No. 469.
Wawpee-shew *Cree Indians.* Kagoos, *Northern Indians* Kŏ-guke, or Koob-yak, *Esquimaux.*
Swan *Parry's Narrative, Second Voyage*, p. 236, 240, 342.

Swans were observed by Captain Parry to arrive in latitude 66° on the 31st of May, and were seen flying to the southward, as if migrating, on the 8th of September. A nest containing eggs was found on the 9th of June, 1822, and is described in the Narrative. The specimen brought home is a female, and was killed at Igloolik on the 19th of June, 1823. At this season, the reddish or yellowish tinge is, as Captain Sabine observes in the Appendix above cited, not confined to the head. In the specimen at present under notice, the crown of the head, nape, and superior parts of the neck, are deeply tinged with reddish-orange, and there is a very slight tint of the same colour spread over the whole abdomen. The colour is confined to the tips of the feathers, and even on the crown of the head, where it is deepest, allows much white to appear.

Hearne mentions, that there are two varieties of swan known at Hudson's Bay, distinguished from each other only by size, the one weighing upwards of thirty pounds, and the other from eighteen to twenty. Mr. Lawson is quoted in *Arctic Zoology*, for the Carolina appellation of Trumpeter to the former, and of Hooper to the latter.

The swan becomes fat soon after its arrival in the fur countries, and is then much prized as an article of food.

31. Anas Mollissima. (L.) *Eider Duck.*

Anas mollissima *Temm.* p. 848. *Greenl. Birds*, p. 554. *Supplement to Parry's First Voyage*, p ccviii. *Fauna Grœnl.* p. 68, No. 42.
Eider-duck. *Arctic Zoology*, ii. p. 553, No. 480. Dunter goose. *Hearne's Journey*, p. 445.
Eider-duck. *Parry's Narrative, Second Voyage*, Sept. 13, 1821, p. 254, 265, 283, 337.

In the specimen brought home, which was killed on June 14 at Winter Island, the siskin-green colour does not extend to the cheeks, nor crown of the head, as mentioned by Temminck, but is confined to the occiput and adjoining

part of the neck, agreeing with the description given by Pennant, in *British Zoology*, p. 245.

The tertiary wing feathers are white, and curve outwards over the primaries. The primaries themselves are blackish-brown, fading at the extremities into clove-brown. Their immediate covertures are brownish-black. In a specimen killed on the 5th June, Mr. Edwards remarked the white of the scapularies to be tinged with greenish-yellow.

The female killed on June 2d agrees with Temminck's description, and also with Pennant's, in *British Zoology*, which is more minute in some parts. The white tips to the secondary wing-feathers, and larger covertures which have been described as forming two white bands across the wings, are small and not visible when the wings are closed.

Eider-ducks were observed breeding in Tern Island in July, when there were most generally two, rarely three eggs in one nest, (p. 283) They are stated by authors to lay five or six eggs; the eggs vary in shape, some being exactly elliptical, others ovate, with a considerable disproportion in the obtuseness of the ends. Their length is three inches, and the greatest transverse diameter two.

The Eider-ducks are sea-birds, being never seen in the interior. They arrive in the quarters visited by our navigators in the end of May, and were observed to be very tame, seldom taking the alarm until warned by their more suspicious companions, the long-tailed ducks. It would appear from this, that they do not migrate in winter, to countries where they are liable to be disturbed by man, but merely retire to sea in search of open water. Fabricius says, that they remain in Greenland all the year, collecting in flocks in the winter time. They are not seen farther south in Hudson's Bay than Churchill River, in latitude 59°.

32. ANAS SPECTABILIS. (L.) *King-Duck.*

Anas spectabilis. *Temminck*, p. 851. *Greenl. Birds*, 553. *Supplement to Parry's First Voyage*, p. ccvii. *Faun. Grænl.* p. 63, No. 39.
King-duck. *Arctic Zoology*, ii. p. 554, No. 481.
King-duck. *Parry's Narrative, Second Voyage*, p. 237, 254, 431, 435, 454, 461.

THE male specimen received, was killed on the 2d of June, and corresponds pretty exactly with M. Temminck's description, but we are enabled to add, from the inspection of a beautiful drawing by Captain Lyon, conjoined with

Mr. Edwards' notes, some particulars respecting the colours of parts that are apt to fade in drying.

The fleshy sides of the compressed gibbosity at the base of the bill have a Dutch-orange colour. The bill itself is vermilion red, and its large nail is nearly flesh-coloured, with a horny translucency. The inferior mandible has a narrow orange-coloured margin next the feathers. The cheeks are pistachio-green, which is separated from the bright bluish-gray of the head and nape, by a white line that is continued over the eye, until it joins the black which surrounds the bill. Both eyelids are black, but this colour is broadest on the under one. The breast is cream-yellow, deepening in the old specimens into ochre-yellow. The posterior part of the back, the wings, tail, and belly, have a blackish-brown colour, which deepens on the curved tertiaries into brownish or pitch-black. The shafts of the tertiaries have a peculiar shining umber-brown colour. The patch of white on the wings is intermixed with a few brownish-black feathers, and one or two of the secondaries are tipped with white. The scapularies have a fine wiry appearance, and the legs an ochre-yellow colour. In other respects, the specimen and drawing correspond exactly with Temminck's description of the old male. The length of a number of individuals measured by Mr. Edwards, varied from 22 to 23½ inches.

The *female* king and eider-ducks resemble each other so exactly in plumage, that one description suffices for both; the only difference being, as Fabricius and Captain Sabine have pointed out, in the compressed base of the bill. The posterior soft plates, or prolongations of the upper mandible of the former, have nearly a vertical position, but in the latter they are more horizontal, like the depressed plates of the male of the same species. The specimen of the female king-duck received, is unusually large, being 24½ inches long, yet its bill is two lines shorter than that of an eider-duck only 22 inches long; other females, however, measured by Mr. Edwards were only 22 inches long.

A *young male*, shot on September 8th, had the head and neck dusky yellowish-gray, crowded with blackish-brown spots. Back, scapularies, and wing covertures, brownish-black, each feather bordered with dark yellowish-brown. Tail, grayish-black, with slight brown tips; one or two of the primary wing covertures have minute white tips. The primary wing feathers are uniform brownish-black, but the secondaries and tertiaries have some brownish margins. The breast has a general yellowish-brown colour, spotted, and inferiorly barred transversely with brownish-black. The black predominates

on the abdomen, but it is so minutely and intimately intermixed with the yellowish-brown, that it assumes, when viewed at a little distance, an uniform dusky clove-brown colour; on the flanks and under tail covertures, the black and brown are in alternate and more distinct bars. The linings of the wings are shining pearl-gray. The posterior prolongations of the bill resemble those of the female. Length 22 inches.

King-ducks were numerous in the quarters visited by Captain Parry, and upwards of 600 were killed by a party sent to Alagnak for the purpose. Like the eider, these birds obtain their livelihood entirely in the sea, and therefore do not visit the lakes of the interior; nor are they seen farther south on the shores of Hudson's Bay, than lat. 59°. Perhaps they never migrate farther from their breeding quarters in the north, than to permanent open water. They arrived at the winter quarters of 1821 in lat. 66°, on the 31st of May, 1822, along with the other summer birds, but at Igloolik, where the open water was perhaps more favourable, they made their appearance on the 16th of April before the other birds.

The eggs vary in form, from oval to more or less ovate. They are 30 or 32 lines long, and 21 lines at the greatest transverse diameter. Their colour is asparagus-green, with a slight tinge of yellowish gray.

33. ANAS GLACIALIS. (L.) *Long-tailed Duck.*

Anas glacialis. *Temm.* p. 860. *Greenl. Birds*, 555. *Supplement to Parry's First Voyage*, p. ccviii.

Anas hyemalis. *Faun. Grœnl.* p. 71, No. 45.

Long-tailed duck. *Arctic Zoology*, ii. p 566, No. 501. *Hearne's Journey*, p. 447.

Caccawee. *Franklin's Journey*, p. 383. Al-diggee-äriov. *Esquimaux.*

Anas glacialis and long-tailed duck. *Narrative, Parry's Second Voyage, Sept. 7, Oct. 4,* 1821, p. 237, 254, 313, 431, 437.

THE long-tailed Duck is one of the most clamorous of the tribe, and is celebrated in the songs of the Canadian voyagers, by the name of *caccawee*. Its arrival in spring could not be overlooked by the American poets in descriptions of that season.

Considerable varieties of plumage are observed amongst the males of this species during the breeding season, probably depending on age.

One killed at Winter Island on the 1st of June, had the cheek and side of the head, from the bill to the middle of the orbit, dull ash-gray. A black band runs in the mæsial line from the bill to the crown, separating the gray

patches on each side from one another. The eye is placed in a spot of pure white, which runs backwards in a tapering manner for an inch. The rest of the head, neck, back and central tail feathers, have a shining brownish-black colour. The wings are blackish-brown, the outer vanes of the secondaries fading into umber brown. The scapularies, and the broad band across the base of the neck above, have the feathers edged with orange-brown (rust colour,) the black central part of each feather having a rhomboidal shape. The exterior tail feathers are totally white, and the three succeeding ones on each side have their outer vanes white. On each side of the rump there is a large patch of pure white, continuous with the white of the abdomen. The under parts of the neck, breast, and anterior part of the abdomen have an unspotted blackish-brown colour. The rest of the abdomen, and the under tail coverts, are pure white. The flanks covered by the wings are pearl-grey, and the linings of the wings are clove-brown, fading on the flag feathers into hair-brown without spots.

Another bird was killed on the 25th of June, precisely similar to the above, except that the grey patches on the face were brighter, and met on the forehead. This state of the plumage, with the addition of a few white feathers on the nape, and a little whitish bordering to the scapularies, (observed in some instances by Mr. Edwards,) is that which is considered by Captain Sabine, in his memoir on the Greenland birds, to be the full breeding plumage.

Mr. Edwards, however, took full descriptions of a considerable number killed between the 1st and 25th of June, and the most of them approached more nearly to the description given by Temminck of the old male in his winter dress.

"They had all a dark silky chestnut-brown patch on each side of the neck; a greater or smaller intermixture of white in the black stripe from the bill to the crown; the crown and nape sometimes entirely white, sometimes with an admixture of black; the borders of the scapularies with more or less white; a broad white collar round the lower part of the neck; in some individuals the feathers composing this collar were tipped with black or brown; below the white collar there was in some instances a narrow band of white feathers on the breast; and some had the upper tail coverts partly white. The colour of the transverse middle band of the bill varied from rose-red to violet*."

The usual length of the full-grown birds killed on this voyage, was from

* Extracted from Mr. Edwards's notes.

21 to 23 inches, or excluding the long tail feathers about 17 inches. Bill measured on the mæsial line, 11 lines, or to the angle of the mouth 17 lines. Length of tarsus 15 or 16 lines. Middle toe and claw 26 lines.

The long-tailed Duck feeds principally on the sea; they pass over the interior of the continent, however, in their migrations, occasionally lighting upon the rivers and lakes to feed upon insects. In 1821, they passed Fort Enterprise in latitude 64° 30″ on their way to the shores of the Arctic sea, in small numbers, on the 24th and 25th of May. They made their first appearance at Captain Parry's spring quarters, in 1822, on June 1st, and in 1823 on May 21st. They were observed collected into large flocks and moulting in the middle of August, and they did not migrate from Winter Island before October 4th. It would appear that as long as they have sufficient open water and food they do not migrate. Fabricius says that they remain in Greenland the whole year, and the same thing is stated by Latham, with regard to Hudson's Bay.

Shape of the eggs ovate approaching to oval, with both ends rather obtuse. Colour betwixt greenish-white, and greenish-gray; 25 or 26 lines long, and 18 at the greatest transverse diameter.

34. Colymbus glacialis. (L.) *Great Northern Diver.*

Colymbus glacialis. *Temm* p 910. *Appendix to Franklin's Journey*, p. 703 *Faun. Græn.* p. 97, No. 52.

Northern Diver, (mature.) No. 439. Immer. (young.) No. 440. *Arctic Zoology*, p. 518. *Hearne's Journey*, p. 429. *British Zoology*, p. 165, No. 1 and 167, No. 2. t. 80. f. 2 and 1.

Galkyeh. *Copper Indians.* Kaglooleek. *Esquimaux* Toodleek. *Greenlanders.*

These birds are numerous in the northern parts of the American continent. They arrive in the fur countries about the end of May, and retire to the south in October. They were frequently seen by Captain Franklin's party during their voyage on the Arctic sea, and Captain Parry received some of their skins from the Esquimaux who visited him. They breed on the shores of small lakes, laying two eggs at a time. Their cry is loud, has a peculiarly hollow and melancholy tone, and when often repeated is said to portend rain. The Canadian voyagers never fail to make a loud hooting noise when this bird passes, for the purpose of rendering it, as they say, foolish. It is certain that it is thus frequently induced to fly in circles round the canoe, and often attracted within gun-shot. In water, they are watchful, and dive so instantaneously, that it is difficult to shoot them. They take wing, however, with

difficulty, although they fly well, and this circumstance enables the hunter to destroy great numbers of them in the spring. They arrive in that season when the ice of the lakes continues entire, except, perhaps, a small basin of open water where a rivulet happens to flow in, or where the discharge of the lake takes place. When the birds are observed to alight in these places, the hunter runs to the margin of the ice, they instantly dive, but are obliged after a time to come to the surface to breathe, when he has an opportunity of shooting them. In this way, upwards of twenty were killed at Fort Enterprise in the spring of 1821, in a piece of water only a few yards square. In the summer and autumn, they are often caught in nets set for fish. The flesh of the northern diver is tough, and is eaten only through necessity.

35. COLYMBUS ARCTICUS. (L.) *Black-throated Diver.*

Colymbus articus. *Temm.* p. 913.
Black-throated diver. *Arctic Zoology*, ii. p. 520, No. 444. *British Zoology*, ii. p. 170, No. 5. t. 30, f. 2 *Hearne's Journey*, p. 430.
Black-throated diver. *Parry's Narrative, Second Voyage, Aug.* 17, 1821, p. 265, 435.

THESE birds were in considerable numbers in the quarters visited by Captain Parry. The length of those shot in the end of June, was noted to vary from 25 to 27 inches, and their weight from $4\frac{1}{2}$ to $5\frac{3}{4}$ lbs. The specimen received was killed on the 28th of June, and is in mature plumage.

The skins of this bird, in common with those of the other species of the genus, are used by the Indians to form caps or bags for holding their smoking materials, and by the Esquimaux are formed into caps, jackets, and trowsers.

36. COLYMBUS SEPTENTRIONALIS. (L.) *Red-throated Diver.*

Colymbus septentrionalis. *Temm.* p. 916. *Greenl. Birds*, No. 16, p. 152. *Supplement to Parry's First Voyage*, p. ccix. *Appendix to Franklin's Journey*, p. 703. *Faun. Græn.* p. 94. No. 62.
Red-throated diver. *Arctic Zoology.* ii. p. 520, No. 443. *British Zoology*, ii. p. 169, t. 80, f. 1. *Hearne's Journey*, p. 430.
Striped driver and speckled diver, (young). *Arctic Zoology*, ii. p. 519, No. 442, and No. 441.
Red-throated diver, and Col. Septentrionalis. *Parry's Narrative, Second Voyage, Sept.* 18, 1821, p. 254, 435, 437.

THESE birds were found breeding by Captain Parry. The eggs, which are two in number, vary in size and form, being sometimes elliptical, sometimes a

little ovate, and in length from 34 to 36 lines, and transverse diameter 20 or 21 lines.

37. Uria Brunnichii. (E. Sabine.) *Brünnich's Guillemot.*

Uria brunnichii. *Temm.* p. 924. *Greenl. Birds*, p. 538, No. 14. *Supplement to Parry's First Voyage*, p. ccix.

Colymbus triole. *Parry's Narrative, Second Voyage, Sept.* 13, 1821.

A male specimen, obtained in June, corresponds exactly with Temminck's description, and a female killed on the 4th of August differed merely in having the flag and tail-feathers faded into clove-brown, and appearing as if worn, and in some very minute white markings on the throat.

38. Uria grylle. (Lath.) *Black Guillemot.*

Uria grylle. *Temm.* p. 925. *Fauna Groenl.* p. 92, No. 60. *Greenl. Birds*, p. 540, No. 15. *Supplement to Parry's First Voyage*, p. ccix.

Black guillemot. *Arctic Zoology*, ii. p. 516, No. 437. *British Zoology*, ii. p. 163, No. 2, t. 28; f. 2, (young.) *Hearne's Journey*, p. 428.

Spotted Greenland dove, *Edw. t.* 50. Pigeon-diver. *Marten's Spitzb.* 79, *t. ab. L. f.* 6.

Dovekie. *Parry's Narrative, Second Voyage, June* 7, 18, *Aug.* 22, 1821, p. 136, 138, 139. *March* 25, 1822, p. 241, 418.

These birds were numerous on the coast of Melville peninsula, and were the only species of water-fowl that remained there during the winter. They were seen during that season, swimming in a piece of open water near the ships, and their absences were merely for short periods. As the winter advanced, they were observed to assume much more white on the plumage than has been described by authors.

A male bird killed on the 22d of July off Tern Island, is in the velvet-black breeding plumage, the only indication of change being a single white feather on the abdomen, and the tips of the scapularies, tail, and the whole wing feathers except the white mirror, having faded into broccoli-brown and appearing worn. The secondary coverts were slightly tipped with white, and the bases of the inner vanes of the flag-feathers, and the whole linings of the wings, were pure white. The length of the specimen from the end of the bill to the claws, is 14½ inches.

A female, killed eight days later, had the wings and tail of the same colour

with the first, and the black plumage both above and below every where thinly interspersed with white feathers; a state which is described by Temminck, as occurring at the commencement of the moulting season.

The most perfect *winter plumage* was as follows.

Head, neck, whole ventral aspect, rump, and mirror of the wings, unspotted white. A small crescentic black spot before the eye, having its horns turned backwards. The back is variegated with black and white, but the latter colour occupying the tips of the feathers, when the plumage is smooth, nearly conceals the black. The scapularies form an oblong patch of pure white, terminated at the lower end by deep black, which unites with the black of the wing. The smallest wing covertures, the flag-feathers, their immediate covertures, the secondaries, tertiaries, and tail feathers, are velvet black. The white mirror is formed by the middle wing covertures; the tips of the long wing covertures and of some of the secondaries are white, forming a narrow transverse band.

The linings of the wings are pure white, and the upper halves of the inner vanes of the flag-feathers are also white. In this perfect winter dress, then, the whole bird may be said to be white, except the tail, the flag-feathers, and a band surrounding the mirror of the wing, into the formation of which the black tips of the long scapularies enter. When the plumage of the back is ruffled, the black bases of the feathers also contribute to produce a further variety of appearance. Legs, bright scarlet.

A specimen killed on the 25th of March, had some black mottling on the mirror of the wing, many of the black bases of the feathers of the back visible, and some very slight margins to the feathers on the belly; but in other respects the plumage was the same as that of the winter bird above described, and the legs also exhibited the bright scarlet colour.

The individuals killed were about 14 inches long to the end of the tail, and 15 or 15½ from the point of the bill to the claws, when the leg was stretched out. The length of the tarse was 12 or 13 lines, and the weight, 12 or 13 ounces.

The speckled white and black birds of this species observed in the Shetland Islands, are supposed to be the young only, left behind; and that the whole migrate. (Montagne, Supp.) We are unable to decide, whether the same explanation would be correct, if applied to the birds seen by Captain Parry, or whether the very great proportion of white in the plumage is the proper livery of the mature birds of the species, when they winter in high northern

latitudes. The dimensions and appearance of the specimens brought home, and their bright scarlet legs, would seem to point them out as full grown.

THE thirty-eight species of birds above noticed, were all that were procured by our navigators after entering Hudson's Straits. The *procellaria puffinus*, (Shearwater or Cape-hens,) *p. glacialis*, (fulmar petrels,) and *uria alle*, (little awks or rotges,) were observed before, and for some time after, passing Cape Farewell in Greenland, but not having been seen on the coast of America, it was judged advisable to omit them in this list.
