

land the following summer. These are now in my collection. They are smaller than eggs of *Cic. alba*, from which also they may be distinguished by a very faint greenish tinge to be noticed on closer inspection.

XLII.—*Abstract of Mr. J. WOLLEY'S Researches in Iceland respecting the Gare-fowl or Great Auk (Alca impennis, Linn.).*

By ALFRED NEWTON, M.A., F.L.S.

As from various causes some time must pass before I can hope to find leisure to arrange the mass of information respecting the Gare-fowl or Great Auk (*Alca impennis*, Linn.) collected by Mr. John Wolley, and continue the inquiries commenced by him on that subject, so as to publish the details in a fitting manner, several of my friends have urged me not to delay making known more fully than has been done the results of that gentleman's researches when in Iceland, in which researches I had, to some small extent, the pleasure of assisting him. Independently of these recommendations, I am influenced by the consideration that I ought not to withhold from naturalists what is likely to be interesting to some of them; and, still more, that, were I to do so any longer, I should run the risk of losing to my late friend's reputation the credit which, from his labours, of right belongs to it. But I trust it will be understood that, in this paper, I make no pretence of giving anything like a complete history of the bird; for that is a task for which, at the present moment, I am certainly not competent, however much I may hope some day to achieve it. I only wish to place on record certain facts which Mr. Wolley was able to ascertain.

As long ago as the year 1847, Mr. Wolley's attention was directed in an especial manner to the Great Auk, and during 1851 and 1852 he bestowed much pains in investigating its history from the works of old naturalists and travellers. When I was with him in Lapland in 1855, we often discussed the chances of its continued existence, finally pledging each other to make a joint expedition to Iceland as soon as it could be conveniently performed. At the same time, I have no wish to underrate the impulse given to my friend's enthusiasm, and through him to my own, during his

visits to Christiania and Copenhagen the following year, when he first heard of the discoveries of the late Herr Peter Stuvitz and Professor Steenstrup, and besides made the personal acquaintance of the last-mentioned illustrious naturalist, who soon after published so valuable a contribution to this bird's history*.

In this paper, therefore, I do not mean to refer much to the bird's appearance in other localities, except in one instance to correct a very prevalent misapprehension. But, on the other hand, I do not claim entire novelty for several of the statements I have to make. Some of them have already found their way into one book or another—sometimes rightly reported, sometimes wrongly. Nor do I profess to be sure that the account I have to give is always the true one. It must be remembered that the results here recorded are the main points of evidence deduced from many authorities, and offered by nearly one hundred living witnesses; and though I do not doubt that the greater number of these latter are persons of eminently truthful habit (for such is the natural characteristic of the Icelander), yet some few there are who may have wilfully told falsehoods. Nor should it be forgotten that it is, humanly speaking, impossible for any two persons, however honestly disposed, to give identically the same version of the same events, though most generally in such cases the variations will be unimportant. Add to this that much of the evidence, though written down at the time by Mr. Wolley (whose note-books I have carefully consulted) in a most painstaking manner, had to pass through an interpreter; and, as nearly all of it referred to a period of many years ago, it will not be surprising if some inaccuracies have crept in.

The particular misconception to which I wish to draw especial attention is, that the Great Auk is, or was, a bird of the *far* North—indeed, of the Polar regions. That such an opinion prevails, one has only to refer to authorities generally received by ornithologists of all countries. Professor Steenstrup, in the paper to which I have alluded, has conclusively shown it to be unfounded, without, however, having been able to trace the error satisfactorily to its source. For myself, I imagine it to have ori-

* Videnskabelige Meddelelser for Aaret 1855. Kjöbenhavn. 1856-1857, pp. 33-116.

ginated in the inadvertence of naturalists, which, in the case of northern localities, leads them to speak of Spitzbergen, Greenland, and Labrador as if they were synonymous, or at least interchangeable terms. Regarding it in this light, long before we had heard of Professor Steenstrup's conclusions, Mr. Wolley and I had satisfied ourselves that statements like Temminek's, that the Great Auk "vit et se trouve habituellement sur les glaces flottantes du pôle arctique, dont il ne s'éloigne qu'accidentellement" (Man. d'Orn. ii. 940), were entirely contrary to fact. There is, I believe, but one reliable instance on record of the Gare-fowl* having occurred within the limits of the Arctic Circle. This is the example said to have been killed on Disco in 1821, and which, after changing hands several times, is now in the University Museum at Copenhagen. The fact has been for the first time recorded in the present volume ('Ibis,' 1861, p. 15), and my friend Professor Reinhardt there expresses his belief that "the accounts of other instances, in which the bird is said to have been obtained in Greenland, are hardly to be confided in †."

There is, I take it, nothing which should really lead us to infer that the Great Auk ever visited Spitzbergen ‡. The first English writer to whom I can trace the report is Mr. Selby (Brit. Orn. ii. p. 433); and that distinguished ornithologist has lately most kindly informed me that the making mention of that locality was a mistake, which would have been rectified had another edition of his work been required. As to Norway, the only supposed instance of its occurring there within the Arctic Circle is that mentioned by Professor Steenstrup (*l. c.* p. 95, n.), and is doubtful

* It may seem somewhat pedantic to revive this ancient and almost forgotten name. In using it I am chiefly influenced by the fact that Mr. Wolley had intended to have employed it.

† I have spoken of the above as a "reliable instance" of an Arctic Great Auk; but I am not sure that even this is free from doubt; for in a letter Professor Reinhardt tells me he has "had some suspicion" whether the reported Disco specimen of 1821 has not been confounded with one asserted by the late lamented Governor Holböll (Krøyer's Tidsskrift, iv. p. 457) to have been obtained at Fiskernæs (South Greenland) in 1815. If this suspicion be correct, the Gare-fowl has probably never once occurred within the Arctic Circle.

‡ Cf. *Ibis*, 1859, pp. 173, 174.

enough. Herr Laurenz Brodtkorb, of Wardœ, in 1855, told Mr. Wolley, repeating the story afterwards in my presence, that in 1848 he shot a large diving-bird, of which he did not know the name, on a flat rocky skerry off Reenœ. He felt very certain that it was not a Great Northern Diver (*Colymbus glacialis*); but he assured us that its beak was like a Guillemot's (*Uria*)—that is, narrow and pointed—and not like a Razor-bill's (*Alca*), thick and truncated. He was equally sure that there was still a pair or two of his species to be found among the Guillemots which breed on this spot. Mr. Wolley, in a letter I received from him about this time (1855), naïvely remarks, "I could not see one; but some of the birds were off their eggs;" and I feel bound to say that, though Herr Brodtkorb has a practical knowledge of ornithology, I cannot consent to his opinion that the bird he shot was a Great Auk*.

Were I about to give a full and detailed account of the Gare-fowl, I should think it best to divide the evidence collected into two classes: (I.) that which may be considered documentary, and (II.) that which is merely oral; again separating this latter into (1) what is only traditional, and (2) what has actually come to my informant's personal knowledge. In the present case, however, I believe it will be most convenient to take the various matters as far as possible in the order of the time to which they refer. But I must first enter upon a brief description of the localities to which I shall have to allude.

Any person who will take in hand the beautiful map of Iceland, executed by Herr O. N. Olsen from the surveys of the veteran Björn Gunnlaugsson, and published in 1844 under the auspices of the Icelandic Literary Society†, will find the name

* I may add, that near Wardœhuus, between the fortress and the shore of the inlet (Vest-Vaagen), on a raised sea-beach, is a vast bed of bones, chiefly those of birds, but mingled with them a few Seals'. We brought away a considerable quantity of specimens; and on some other occasion I may probably give an account of them; but I am sure that they do not include a single fragment which could possibly be a Gare-fowl's.

† Uppdráttir Íslands, à fjórum hlöðum gjöðr að fyrirsögn O'. N. O'lSENS, gefinn út af Enu Íslenzka Bókmentafélagi. Reykjavík og Kaupmanna-höfn, 1844.

'Geirfuglasker' (Gare-fowl skerry) occurring in three different places. The most eastern is situated some thirty miles from the coast, off the island of Papey, and the entrance of Berufjorðr, about lat. $64^{\circ} 35' N.$, and long. $26^{\circ} W.$ (of Greenwich), and is commonly known to Danish sailors as Hvalsbak (Whale's-back). The most southern is one of the Vestmannaeyjar (Westman Islands), in about lat. $63^{\circ} 20' N.$, and long. $33^{\circ} 5' W.$ The most western is off Cape Reykjanes, in about lat. $63^{\circ} 40' N.$, and long. $35^{\circ} 50' W.$ It was accordingly our first object to ascertain how far these spots now deserved the name they bore. On making all the inquiries we were able on our arrival at Reykjavik, we could obtain no recent information respecting the eastern skerry, of which we had, at starting, entertained most hopes. It appeared also that, of the travellers who in the last century had published accounts of their journeys in Iceland, Olafsen and Olavius only had alluded to this isolated rock as a station for the bird*, though another of them, the Færøese, Mohr, was in 1781 for no less than two months at Djupivogr, on the mainland opposite, engaged in the pursuit of natural history†. We therefore decided we would not attempt the journey thither, at the risk of missing what seemed a better chance - that of finding the object of our search in the neighbourhood of the western locality, where examples of the bird were known to have been last obtained. At the same time, we thought it highly desirable that this eastern Geirfuglasker should be visited, and through the intervention of several kind friends, we at last met with a gentleman who was willing, for a suitable recompense, to undertake the toilsome, not to say dangerous, expedition. To dismiss this part of the subject at once, I may here say that our envoy, Herr Candidatus-Theologicæ Eiríkur Magnusson, a native of that district, reached Berufjorðr in the month of June, and then, taking a boat, proceeded to the island, round which he rowed, quite close enough to satisfy himself that there were no Gare-fowls on it;

* *Reise igiennem Island, &c. af Eggert Olafsen.* Sorøe, 1772, p. 750.

Oeconomisk Reyse igiennem de nordvestlige, nordlige, og nordostlige Kænder af Island ved Olaus Olavius, &c. Kjøbenhavn, 1780, u. p. 547.

† *Forsøg til en Islandsk Naturhistorie, &c., ved N. Mohr.* Kiøbenhavn, 1786, p. 383.

but he was prevented by the unfavourable state of the weather from landing. On his return next month to Reykjavik, he informed us that there were no traditions in that part of the country of the bird ever having been there. Respecting the second Geirfuglasker I have mentioned, that which forms one of the Vestmannaeyjar, we heard on all sides that it was yearly visited by people from the neighbouring islands, and, though we were told that some fifteen years before a young bird had been obtained thence*, it was quite certain that no Great Auks resorted thither now.

Of the third locality I have now to speak. Lying off Cape Reykjanes, the south-western point of Iceland, is a small chain of volcanic islets, commonly known as the Fuglasker, between which and the shore, notwithstanding that the water is deep, there runs a Röst (Roost), nearly always violent, and under certain conditions of wind and tide such as no boat can live in. That which is nearest the land, being about thirteen English miles distant, is called by Icelanders Eldey (Fire Island), and by the Danish sailors Meel-sækken (the Meal-sack), a name, indeed, well applied; for, seen from one direction at least, its appearance is grotesquely like that of a monstrous half-filled bag of flour, the resemblance, too, being heightened by its prevailing whitish colour. Not very far from Eldey lies a small low rock, over which it seems that the sea sometimes breaks. This is known as Eldeyjardrángur (Eldey's Attendant). Some ten or fifteen miles further out are the remains of the rock formerly known to Icelanders as the Geirfuglasker proper, and to Danes as Lade-gaarden (the Barn-building), in former times the most considerable of the chain, but which, after a series of submarine dis-

* Of course it does not follow, even if the story be true, that this bird was bred there. Faber states (Prodromus der islandischen Ornithologie, Kopenhagen, 1822, p. 49), that he was on the Westman Islands in July and August 1821, and that a peasant there told him it was twenty years since a Great Auk (and that the only one of the species he had ever seen) had occurred there. He adds, that this bird and its egg, upon which it was taken, remained a long time in a warehouse on one of the islands, but had vanished before his arrival. We may, with Professor Steenstrup (*l. c.* p. 76, note), infer from this that the Gare-fowl, even about the year 1800, was a great rarity in the neighbourhood.

turbances, beginning on the 6th or 7th of March 1830, and continuing at intervals for about a twelvemonth, disappeared completely below the surface; so that now no part of it is visible, though it is said that its situation is occasionally revealed by breakers. Further out again, perhaps some six-and-twenty English miles from Reykjanes, rises another tall stack, called by Icelanders Geirfugladrágr, and by Danish sailors Greenadeer-huen (the Grenadier's Cap). All these rocks have been long remarkable for the furious surf which boils round them, except in the very calmest weather. Still more distant is a rock to which the names *Eldeyja-bodi* or *Blinde-fuglasker* have been applied by Icelanders. This is supposed to have risen from the sea in 1783, the year of the disastrous volcanic eruption in *Skaptafells-sýsla*, and soon after to have sunk beneath the waves*.

Icelandic records show that, at the beginning of the thirteenth century, various changes took place among the islands off Reykjanes just enumerated. It is stated that a rock, then known as *Eldey*, disappeared; but another being thrust up close by, the old name was transferred to the new-comer, and has since been borne by it. No notice is taken in manuscripts of that remote time of the birds found on these islands; but doubtless they were even then, weather permitting, visited by the inhabitants of the adjoining coast. Indeed, it is asserted in Wilchin's '*Máldagabók*' (which dates from 1397, and has not, I believe, been printed), that half the *Geirfuglasker* belonged to Mary Church in *Vogr*, now represented by *Kyrkjuvogr*, and one-fourth to St. Peter's, *Kyrkjubolu*, of which the church at *Utskála* is the modern equivalent—claims which were still looked upon as extant until the submergence of the skerry put an end to them. It has been suggested that the remaining quarter was shared by the church of *Staðr* in *Grindavík*; but most likely it was left to reward the bold adventurers who resorted thither. In 1628, twelve men were drowned at the *Geirfuglasker*, no doubt in a fowling expe-

* I should have wished to have given, in explanation of the above description, a sketch map of these localities, but I have not the means of doing so accurately. From our own observations, Mr. Wolley and I had reason to doubt whether the bearings of these islands have been correctly laid down either in *Gunnlaugsson's* map or the Danish Admiralty chart.

dition ; and in 1639* four large boats (three from Suðrnes, the district between Skagen and Osar, and one from Grindavik) proceeded thither ; two of which, those from Stafnes and Marsbuðum, were lost at the skerry, while the other two, from Hvalsnes and Staðr, only returned with difficulty. It might have been some such disaster as this that prompted a metrical effusion composed by Séra Hallkiell Stephansson, the clergyman of Hvalsnes, who flourished between 1655 and 1697, of which it is feared only two lines have been preserved to posterity. In these the poet says that he has never trusted himself to Geirfuglasker, as, on account of the surf, boats were broken by the waves there. In 1694, a French vessel was wrecked on the island, but the crew landed in their boats at Miðnes.

Soon after our arrival at Reykjavik, we were pleased to learn that the public library there contained a short but beautifully written manuscript account of the Reykjanes Geirfuglasker. For a knowledge of its existence we were indebted to the kindness of Professor Konrad Maurer of Munich, well known as one of the most distinguished Icelandic scholars, and the pleasure of whose company we enjoyed during our voyage to the North, and part of our residence in the capital. The liberality also of the librarian in allowing us the free use of, and permission to copy, this curious document, must not pass unnoticed here. From the penmanship and the paper on which it is written, it is believed by good judges whom we consulted to be probably a copy. From internal evidence, which need not now be detailed, I venture to express my opinion that the original must have been composed within a few years of 1760. It commences abruptly by giving a somewhat minute description of the rock and its unquestionably volcanic origin ; making, however, no reference to its neighbouring islands. It then proceeds to relate the marvellous numbers of birds found upon the rock, adding that the " Gare-fowl is there not nearly so much as men suppose ;" that the space he occupies

* There is an apparent misprint of " 1439 " for the above date in Professor Steenstrup's reference to this event (*l. c.* p. 83, note). The particulars mentioned in the text were supplied to us by Séra S. B. Sivertsen, the clergyman at Utskála, to whom we were indebted for many similar acts of kindness.

“cannot be reckoned at more than a sixteenth part of the skerry,” and this only at the two landing-places; “further upwards he does not betake himself, on account of his flightlessness.” The writer then goes on to speak of the extreme danger of landing on account of the surf, saying that to go there is to place life and death on an even chance; and after mentioning the report, which is even now current, that a successful expedition to the skerry was equally profitable with a summer's hiring of two hundred fishes' value in the north country, and citing the statement from the Máldága, to which I have before referred, concludes with Sir Hallkiell's couplet mentioned above. Besides this, there are appended two foot-notes. In the first, the writer says that in the year 1732, after a lapse of seventy-five years, the skerry was visited, and two huts, three birchen staffs about two ells long, and some withered human bones, were found thereon; adding, by way of comment, that three men had been known to have supported themselves on the rock by eating sun-dried birds, and drinking rotten eggs for half a month before they were taken off. The second note gives a very accurate description of the Gare-fowl and its peculiarities, including its eggs, which the writer describes as if he had been an enthusiastic oologist, though he considers it worthy of remark that he has “known Danes give eight to ten fishes* for an empty blown egg,” the climax being the apostrophe “*Rara avis in terris!*” Not the least singular part of the manuscript is an inserted leaf, on which is drawn a very quaint sketch of the skerry. Two boats are seen, anchored with large stones, according to the Icelandic custom still prevalent. In one of these are seated three, and in the other two men, waiting the return of three comrades, who are on the rock, hunting what appear to be Gare-fowls, of which upwards of sixty are represented.

Now, it has been above stated that in 1732 expeditions to the skerry were resumed after being long discontinued, and, in con-

* I much regret not being able to give, in explanation of this and the passage mentioned a few lines above, the worth of a *fish* at the period when I suppose this manuscript to have been written. It was, and in the secluded parts of the country still is, the unit of the Icelandic currency, but, of course, a unit of very variable value.

nexion with this fact, it may not be amiss to observe that Anderson, some time Burgomaster of Hamburg, in his account of Iceland, remarks* on the occurrence of many Great Auks the year before the death of King Frederick IV. (of Denmark), which took place in 1730. Hereupon Niels Horrebøw, whose principal object was to contradict all Anderson had said, with some reason ridicules† his predecessor's notion of that event being thus heralded, and asserts that no more birds were seen in the year mentioned than previously. But it seems to me improbable that Anderson should have no grounds for his statement, though of course I do not admit the portentous inference, and, if so, it is not unlikely that the renewal of visits to the Geirfuglasker, in 1732, may have been prompted by the report the last-named author mentions of the bird's abundance three years before. On the other hand, I am unable to connect this reported abundance with any other physical phenomenon. I do not find that the period just previous to 1729 was marked by any volcanic outbursts, or the presence of any extraordinary amount of floating ice, either of which events might be supposed to affect the bird's movements.

In 1755, Eggert Olafsen and Bjarne Povelsen, to whose accurate account of Iceland I have already alluded, explored the Gulbringu Sýsla, which comprehends the south-western corner of the island, and they passed the following winter at Viðey (*op. cit.* pp. 848, 849), during which time it is mentioned that they saw both the bird and its egg, which had been obtained from the Reykjanes skerry by some Suðnes boats (p. 983). A few years later, Mohr in his work, which I have also before mentioned, says (*op. cit.* p. 28) that he was assured by the peasants that the bird was blind when on land, a notion not entertained by the Færøese, but which still prevails in Iceland. He was also told that in former days people had filled their boats with its eggs from the Reykjanes station, and though he does not expressly say so, I think we may infer from these authorities that about the middle

* 'Herrn Johann Anderson, &c. Nachrichten von Island, Grönland und der Strasse Davis, &c.' Frankfurt u. Leipzig, 1747, p. 52.

† 'Tilforladelige Efterretninger om Island, &c.' Kjöbenhavn, 1752, pp. 175, 176.

or towards the end of the last century this Geirfuglasker was constantly visited by fowling expeditions. Local tradition makes the same assertion, assigning the leadership of these adventurous exploits to one Svenbjorn Egilsson, born in 1700, and Hannes Erlendsson, born in 1705 ; but later their place was taken by one Hreidar Jónsson, whom people now living can remember as a blind pauper some eighty years of age, with a long beard. This hero was born, as it appears, in 1719, and used to go yearly to the skerry on behalf of Kort Jónsson, a rich farmer at Kyrkjuból, who flourished between 1710 and 1760. Hreidar is even reported to have made during one summer three expeditions, in which he acted as foreman. After his time the practice seems to have died out ; but one witness informed us that, to the best of his recollection, people had made voyages between 1784 and 1800. Faber, who was in Iceland in 1821, and then attempted to reach the skerry (of which exploit I shall presently speak), tells us (*op. cit.* p. 48), that for a long period these perilous expeditions had been relinquished—probably because the results from repeated performance fell short of the risk incurred. But the birds were not wholly banished ; for Thorwalder Oddsson, born about 1793, told us, that when he was a boy, some nine or eleven years old, he found one on the shore at Selvogr, and a few years later, probably between 1808 and 1810, two were killed at Hellirsknipa, between Skagen and Keblavik. Erlendur Guðmundsson, an old man with a most retentive memory, showed us the gun with which he shot one of them. He was in a boat with his brother-in-law, A'sgrimur Sæmonsson, who died in 1847, and the occurrence happened in the month of September. The Gare-fowls were sitting on a rock : A'sgrimur fired first, and killed one ; the other took to the water, and was shot by Erlendur. They each ate their respective birds, and very good meat they found them. A third is said to have been shot a few years later, near the same spot, by one Jacob Jonsson, now dead ; this also was eaten.

The cause, however, of the most wholesale destruction of Great Auks in modern times must be sought elsewhere. In 1807 hostilities commenced between England and Denmark. The following year, the 'Salamine,' a privateer of twenty-two

guns, under British colours, and commanded by one John Gilpin, but probably owned by Baron Hompesch, who was also on board, appeared at Thorshavn, the capital of the Færöes, which her crew almost entirely plundered, ending by carrying off a certain Peter Hansen, whom they forced to pilot them to Iceland. Arrived at Reykjavik, July 24th, 1808, they repeated their outrages, and before they finally quitted the island paid a visit to the Geirfuglasker, where they remained a whole day, killing many birds and treading down their eggs and young. After this they sailed away, August 8th, and deposited Hansen again in the Færöes. On February 7th, 1810, at the solicitation of Sir Joseph Banks, an order in council was set forth by the British Government, exempting the northern possessions of the Danish Crown from any molestation on the part of English cruisers, and permitting the inhabitants of the same to trade with either London or Leith, though not with the mother-country. The Court of Copenhagen met this act of common humanity by issuing decrees, strictly prohibiting, on pain of death, all intercourse with the British*. The consequence was, that the unfortunate Færöese were nearly reduced to a state of starvation; and in 1813, as a last resource, their Governor, Major Löbner, determined to send a vessel to Iceland to obtain some necessaries. This vessel, the schooner 'Færöe,' of twelve guns, he placed in charge of Hansen, as one already acquainted with the coast. When they came off Cape Reykjanes, they were becalmed; and a boat being lowered, a party went off to one of the skerries, on which, as their Captain expected, they found abundance of birds, and among them many Great Auks. They killed all they could, and loading the boat quite full, yet left many dead ones on the rock, intending to return for them; but the wind springing up, Hansen made sail for Reykjavik, where, about a week later, they arrived on the 29th of July, having then on board among their victims no less than twenty-four Gare-fowls, besides others which were already salted down. One of these birds is said to have been given to the Bishop (Vidalin), and by him sent to a friend in England. Mr. Wolley conversed

* *Journal of a Tour in Iceland in the Summer of 1809.* By William Jackson Hooker, F.L.S. &c., 2nd ed. London, 1813, vol. ii. pp. 57 *et seqq.*

with one of the two survivors of this voyage, Daniel Joensen, in 1849*; and on July 25th, 1858, through the kind attention of Herr Sysselmand H. Müller, we had an interview with the other, a clear-headed old man, Paul Medjord by name. The accounts of these two witnesses differ from each other in no material point; but it does not seem quite certain whether the rock on which they landed was the Geirfugladránger or the Geirfuglasker proper. Many of the above particulars, including the exact dates, which I believe have never before been published, were most obligingly furnished us from the official records by Herr Dahlerup, the Governor of the Færöes, and Herr V. Finsen, the By-fogden of Reykjavik; but Faber, in 1822, briefly mentioned this massacre, and in 1839 the late Etatsraad Reinhardt † added some further information, which notices have been copied into various other works.

In 1814, according to Faber (*loc. cit.*), seven Great Auks were killed on a little skerry at Látrabjarg, on the north shore of Breidifjörðr. I do not know any other reported instance of its occurrence there or elsewhere in Iceland so far to the north. Olafsen (*op. cit.* p. 562) gives a lengthened description of the locality and the birds which frequent it, but makes no mention of *Alca impennis*. The only notice of the place I can find besides is in Mr. Metcalfe's amusing little book, just published ‡. This gentleman tells a story to show that spiteful spirits dwell in some part of the cliff, but does not suggest that they are the ghosts of departed Gare-fowls.

Faber further informs us (*op. cit.* p. 48) that on the 25th of June, 1821, he started on an excursion to the Reykjanes skerries. He was accompanied by a Danish merchant, a Swedish count, and the latter's servant §. Of the Icelanders who were on

* Contributions to Ornithology, 1850, [edited] by Sir William Jardine, Bart., &c. Edinburgh, 1850, p. 116.

† Kröyer's Naturhistorisk Tidsskrift, i. p. 533.

‡ The Oxonian in Iceland, &c. By the Rev. Frederick Metcalfe, M.A., &c. London, 1861, p. 260.

§ I am not so fortunate as to possess a copy of Faber's other work, 'Ueber das Leben der hochnordischen Vögel' (Leipzig, 1825); nor have I seen the paper in the 'Isis' for 1827 (p. 633), in the latter of which I am informed he gives the fullest particulars of his expedition; I therefore

board the vessel, the 'Villingar,' a cutter belonging to one Jón Danielsson, only one survives. He, by name Olafur Pálsson, gave us an account of the voyage, closely agreeing with Faber's, which he had never seen. They came first to the Geirfuglasker, and sailed between it and the 'dránger,' where the Count, whose name I have been unable to ascertain, landed and gathered some sea-weed. Then the weather became fair, and they proceeded to the skerry itself, where they arrived in the evening. Faber remained on board, but the Count again landed, and presently fell into the water. They picked him up, and his servant shot a good many Gaunets (*Sula bassana*). Later in the evening they returned, and some of them went on shore, but could find no way up. Jón Danielsson declared he was ready to stop a week; the Count, however, seemed to have had enough of it, and "Fugle Faber thought as the Count did." They were out two days and two nights at the rocks. They did not go near Eldey, saw no Gare-fowls, and their opinion was that they must have been all killed by the French sailors, as they had heard a vessel of that nation had been seen there two summers before*. Jón Jónsson, son of the owner of the 'Villingar,' then a lad about twelve years old, who assisted in putting the foreigners on board her, and had often heard his father and elder brother speak of the expedition, also corroborated Olafur Pálsson's narrative.

It is clear, however, that at this very time there were Great Auks in the neighbourhood; for, a few days later in the season, two birds were seen sitting on a low rock, close to the place where I have before mentioned that two or three were shot, and were killed with a sprit or gaff by another Jón Jónsson (now

have to content myself with the translated extracts therefrom contained in a paper "On the Great Auk," communicated May 19, 1859, by Dr. Edward Charlton to the Tyneside Naturalists' Field Club, and published in their 'Transactions,' vol. iv. pp. 113 *et seqq.* This paper has also been reprinted in the 'Zoologist' for 1860, p. 6883.

* It does not seem to me at all impossible that there should be some truth in this report. Mr. Scales has kindly informed me that he obtained the fine Great Auk's egg, now in his possession, from M. Dufresne, who had one or two others in his collection, in 1816 or 1817. It was said to have come from the Orkneys, which, however, I think is extremely unlikely.

dead) and his son Sigurðr, who related the circumstance to us. This witness is certain that it was about the beginning of July of the same year as that of Faber's visit. They sold the skins, which our informant himself took off, commencing the operation by making a hole transversely across between the legs, as he would do in the case of a quadruped. They afterwards ate the bodies, and sold the skins to the A'sgrimur before mentioned*. The occurrence of so many examples of this bird nearly in the same locality may perhaps be accounted for by the fact that the tide runs in very strongly round Skagen, and sets along Holmsberg †. The Auks, after fishing on that side of the promontory, may have found themselves unable to make head against the current, and so have betaken themselves to the shore.

I may here observe that we failed to gather any further information respecting a bird said by Dr. Kjærbølling (Danmark's Fugle, p. 415) to have been killed in 1818 on a place in South Iceland, where many had been observed; but Etatsraad Reinhardt records (*loc. cit.*) the death of one in 1828, and I think the Doctor is altogether mistaken in the assertion that "Apothecary Mechlenburg of Flensborg possesses a pair which were killed on the Gare-fowl skerries in 1829, where they were courageously defending their two eggs." But of this last supposed capture I shall say more presently.

* The Icelandic skins of Foxes (*Canis lagopus*) are all flayed in the way above described. I cannot help suggesting that these may have been the two Great Auks' skins stated by the late Etatsraad Reinhardt (*loc. cit.*) as being received in 1823 from Oerebakke (Eyrarbakki), though they were said to have been killed there in that year by a boy with a stick. Faber, when in the district, lived for some weeks in A'sgrimur's house, who was probably thus aware that he wanted them. On leaving it he went in the direction of Eyrarbakki, on July 9th he was five miles to the east of Kebabvik, and in the end of that month and in the next was on the Westman Islands (*Prodr.* pp. 38 & 49). Some persons we saw declared that he had three specimens, but he himself says somewhere (I think in the 'Isis') that he never procured any of this species. Possibly, therefore, they were sent after him to Eyrarbakki, and thence some two years afterwards to the Museum at Copenhagen.

† We obtained information respecting the tides from a manuscript account of Gulbringe-sýsla, written about 1784, by the then Land-foged Skule Magnusen, which was kindly lent to Mr. Wolley, and the account was confirmed by the statements made to us by fishermen.

We now come to the most modern period in the Great Auk's history. In 1830, as I have before said, the Geirfuglasker off Reykjanes disappeared beneath the waves. Whatever motive prompted him, it is certain that in that year one Brandur Guðmundsson, an inhabitant of Kyrkjuvogr, who died in 1845, bethought him of making an expedition to Eldey, or the Meal-sack, the high rock which stands between the sunken island and the Cape. All the dwellers in the district concur in saying that before that time no rumour of the birds breeding there had ever reached them. It seems that in that year he led two voyages to this new-found locality, in one of which twelve or thirteen, and in the other eight examples were captured. Six of these were purchased by Adnor Gunnarsson, and as many more by Holgeir Jacobæus, two merchants living at Keblavik, while the remainder are unaccounted for. On the first occasion the weather was fine, and all the party but two landed. Besides the Gare-fowls they took a great many other birds, Razor-bills and Guillemots. The second time the weather was bad, and only four men went up. They had to come away very quickly. These and many other particulars of interest which I could give, were I not afraid of extending these notes to an unreasonable length, were related to us by two men (brothers), Stephan and Jón Gunnarsson, the only survivors of those who were present. The following year another voyage was undertaken by the same foreman, and whether that the birds were more numerous, or that their persecutors had learned experience (for on the previous occasions several had escaped), twenty-four were captured, of which one was brought off alive, and so taken to Keblavik, where, however, it was killed, or at least died. These two dozen Gare-fowls were all skinned by one person, a woman, Sigrída Thorlaksdotter, who told us that she performed the operation in her accustomed way, opening them under the right wing, and stuffing the skins with fine hay. The same merchants as before, with the addition of Dethlef Thomsen, shared them. It is not very easy for me to reconcile the various conflicting statements about the captures of the next two years, but in 1833, thirteen birds were probably taken, and in 1834, nine birds, with eight eggs, seem to have been obtained, of which one

bird was given to the Crown Prince (the present King of Denmark), who then happened to be in Iceland, and subsequently passed into the possession of the late Herr Mechlenburg. The remaining eight were purchased by Herr Thomsen, just mentioned, whose son most obligingly showed Mr. Wolley an account of the transaction in his father's books. They were skinned by Madame Thomsen and her sister, Jomfrue A. C. Lewer, who informed us that they were opened under the wing, and the skins stuffed with hay, the bones being wrapped round with hemp. The eggs were quite fresh, and were blown by the two ladies. All these specimens were disposed of to Herr De Liagre, a dealer at Hamburg, and, I may add, I think that one of the eggs now in my possession belonged to this lot. In August 1840 or 1841, three skins, as many eggs, and the body of a bird in spirit were bought of Factor Chr. Thæ, now living at Copenhagen, by Herr S. Jacobsen, who told us that he parted with them either to Herr Selning, a naturalist at Hamburg, or to Mr. Jamrach, the well-known dealer. Two of these birds, or else two more some other year, were obtained by one Stephan Sveinsson of Kalmanstjorn, whom the good people of Kyrkjuvogr seem to look upon as a kind of poacher on what they consider their rightful domain. Certain it is that on one occasion Herr Thæ bought two birds of this Stephan, as the latter informed us, but the exact date is not so clear.

The last Gare-fowls known to have occurred in Iceland were two in number, caught and killed in 1844 by a party, of which our excellent host at Kyrkjuvogr, Vilhjálmur Hákonarsson, was the leader. They were bought, singularly enough, by Herr Christian Hansen, son of that Hansen I have before alluded to as having been (though, in the first instance, against his will) so dread a scourge to the race. From him they passed to Herr Müller, then the apothecary at Reykjavik, who, previously to having them skinned, prevailed upon M. Vivien (a French artist) to paint a picture of one of the dead birds, which picture now hangs in the house of his successor, Herr Randrup, the present apothecary in the capital of Iceland. As many persons may regard these birds as the latest survivors of their species, I may

perhaps be excused for relating at some length the particulars of their capture, the more so as this will serve to explain the manner followed on former occasions.

The party consisted of fourteen men: two of these are dead, but with all the remaining twelve we conversed. They were commanded, as I have just said, by Villjálmur, and started in an eight-oared boat from Kyrkjuvogr, one evening between the 2nd and 5th of June, 1844. The next morning early they arrived off Eldey. In form the island is a precipitous stack, perpendicular nearly all round. The most lofty part has been variously estimated to be from fifty to seventy fathoms in height; but on the opposite side a shelf (generally known as the "Underland") slopes up from the sea to a considerable elevation, until it is terminated abruptly by the steep cliff of the higher portion. At the foot of this inclined plane is the only landing-place; and further up, out of the reach of the waves, is the spot where the Gare-fowls had their home. In this expedition but three men ascended: Jón Brandsson, a son of the former leader, who had several times before visited the rock, with Sigurðr Islefsson and Ketil Ketilsson. A fourth, who was called upon to assist, refused, so dangerous did the landing seem. As the men I have named clambered up, they saw two Gare-fowls sitting among the numberless other rock-birds (*Uria troile* and *Alca torda*), and at once gave chase. The Gare-fowls showed not the slightest disposition to repel the invaders, but immediately ran along under the high cliff, their heads erect, their little wings somewhat extended. They uttered no cry of alarm, and moved, with their short steps, about as quickly as a man could walk. Jón with outstretched arms drove one into a corner, where he soon had it fast. Sigurðr and Ketil pursued the second, and the former seized it close to the edge of the rock, here risen to a precipice some fathoms high, the water being directly below it. Ketil then returned to the sloping shelf whence the birds had started, and saw an egg lying on the lava slab, which he knew to be a Gare-fowl's. He took it up, but finding it was broken, put it down again. Whether there was not also another egg is uncertain. All this took place in much less time than it takes to tell it. They hurried down again, for the wind was rising. The

birds were strangled and cast into the boat, and the two younger men followed. Old Jón, however, hesitated about getting in, until his foreman threatened to lay hold of him with the boat-hook; at last a rope was thrown to him, and he was pulled in through the surf. It was "such Satan's weather," they said, but once clear of the breakers they were all right, and reached home in safety. Next day Vilhjálmur started with the birds for Reykjavik to take them to Herr Carl F. Siemsen, at whose instance this particular expedition had been undertaken; but on the way he met Hansen, to whom he sold them for eighty Rigs-bank-dollars (about £9). According to Professor Steenstrup (*op. cit.* p. 78), the bodies are now preserved in spirit in the Museum of the University of Copenhagen, but respecting the ultimate fate of the skins I am not quite sure.

Several other expeditions besides those to which I have here adverted no doubt took place between the years 1830 and 1844, but I cannot at present give either the dates or the results. Herr Siemsen informed Mr. Wolley that twenty-one birds and nine eggs had passed through his hands; but this account contains other details which are certainly inaccurate. If all the stories we received can be credited, the whole number would reach eighty-seven. I should imagine sixty to be about the real amount. Of these a large portion went to the Royal Museum at Copenhagen, as is stated by the late Etatsraad Reinhardt (*loc. cit.*); a good many more passed into the hands of Herr Brandt, whose son informed Mr. Wolley that, in or since the year 1835, his father had had nine eggs, and I suppose birds to match. Two eggs were also purchased by a certain Snorri Sæmonasson then living at Keblavik, but what became of them I do not know. I have also learnt, on undoubted authority, that the late Herr Mechlenburg has had in all eight birds and three eggs*. From this naturalist, in April 1844, Mr. John Hancock, by the intervention of Mr. John Sewell of Newcastle, received a bird and an egg, which are now in his collection, with the information that they were taken together with another bird and another egg, a year or two previously,

* Herr Pastor W. Pässler has some remarks on these in the 'Journal für Ornithologie,' 1860, p. 59.

on an island "at the *north-east* side of Iceland." A wrong locality was probably furnished on purpose to mislead Herr Mechenburg; but the fact of his never having had more than three eggs, of which two came into his possession in, or shortly before the year 1844, entirely disposes of Dr. Kjærbølling's assertion to which I have before alluded*. Thus it is pretty evident that most of the specimens of the Great Auk and its eggs, which now exist in collections, were obtained from Eldey between the years 1830 and 1844†.

From what has been already stated, it will be seen how great Mr. Wolley's industry in collecting information was; yet I must add a few more words. In former days, the Gare-fowls were, in summer time, so constantly observed in the sea by the fishermen, that their appearance was thought but little of. The people from Kyrkjuvogr and Suðrnes used to begin to see them when they arrived off Hafnaberg, and from thence to Reykjanes-röst. We were told by many people that they swam with their heads much lifted up, but their necks drawn in; they never tried to flap along the water, but dived as soon as alarmed. On the rocks they sat more upright than either Guillemots or Razor-bills, and their station was further removed from the sea. They were easily frightened by noise, but not by what they saw. They sometimes uttered a few low croaks. They have never been known to defend their eggs, but would bite fiercely if they had the chance when caught. They walk or run with little, short steps, and go straight like a man. One has been known to drop down some two fathoms off the rock into the water. Finally, I may add that the colour of the inside of their mouths is said to have been yellow, as in the allied species.

In 1846 Eldey was visited by Vilhjálmur and a party, and

* The additions which, in the last edition of his work, Mr. Yarrell made to his account of this bird (B. B. 3rd ed. vol. iii. pp. 482-3), are copied from Mr. Lloyd's 'Scandinavian Adventures' (ii. pp. 496-7), having been originally taken from Dr. Kjærbølling's book, and are very inaccurate.

† Lists of these, which are in the main correct, though I know of a few that are omitted, have lately appeared in the 'Zoologist' for the present year (pp. 7353 & 7386), and almost simultaneously in the 'Field' newspaper (Nos. 423 & 424, pp. 93, 114). Further remarks on them will be found in the former journal (pp. 7387 & 7438).

no Gare-fowls could be found. In 1858 Mr. Wolley and I remained at Kyrkjuvogr, with two short intervals, from May 21st to July 14th. Our chief object was to reach not only Eldey, but the still more distant Geirfugladránger, on which, probably, no man has set foot since the Swedish Count, in 1821, with so much difficulty reached it. Boats and men were engaged, and stores for the trip laid in; but not a single opportunity occurred when a landing would have been practicable. I may say that it was with heavy hearts we witnessed the season wearing away without giving us the wished-for chance. The following summer was equally tempestuous, and no voyage could be attempted. Last year (1860), on the 13th of June, Vilhjálmur successfully landed on Eldey, but he found no trace of a Great Auk, and the weather prevented his proceeding to the outer island. Later in the year a report reached Copenhagen, which was subsequently published in the newspaper 'Flyveposten' (No. 273), to the effect that two eggs of this bird had been taken on one of the skerries and sold in England for fabulous prices. Through the kind interest of several friends, I think I am in a position to assert that the statement is utterly false. The last accounts I have received from Iceland, under date of June the 20th in the present year (1861), make no mention of any expedition this summer. I am not very sanguine of a successful result, but I trust yet to be the means of ascertaining whether, at the sinking of the true Geirfuglasker, some of the colony, deprived of their wonted haunt, may not have shifted their quarters to the Geirfugladránger, as others, we presume, did to Eldey, and to this end I have taken and shall continue to take the necessary steps.

But to sum up the account of Mr. Wolley's personal researches. The very day after our arrival at Kyrkjuvogr he picked up from a heap of blown sand, two or three birds' wing-bones (*humeri*)*. He was at once struck with their likeness to the figure illustrating Professor Steenstrup's paper—that valuable paper to which I first of all referred, and which has

* They were from the side of a channel blown out by the wind from a heap formerly drifted there, such as in the eastern counties of England would be called a "Sand-gall."

been constantly at my side while compiling this abstract of Mr. Wolley's notes. A little comparison, not only with the engraving, but with the corresponding bones in other species, a good supply of which there was no difficulty in procuring, soon showed that he had not been mistaken, and accordingly bone-seeking became one of our recognized occupations. Yet I cannot say that even here we were very successful; curiously enough where the chances seemed the best we never found anything. Thus the old Geirfuglasker having formerly been shared by the churches of Kyrkjubol and Mariu-Kyrkja-i-Vogi, we naturally thought that the "Kjökken-möddinger" (Kitchen-middens) at those places would be likely to yield the best supply. Yet at what we were told was the site of the latter not a vestige of a bone could be found. The ground was covered everywhere with great stones—the little soil there was between them seeming as if it had drifted into its present position, while the sea may have completely washed away the rubbish-heaps, if houses ever stood there. At the former place—Gammall Kyrkjubol—though there was a very large grass-grown mound entirely composed of ancient refuse, and into which we made a deep excavation, we did not recover a single fragment of a Great Auk—scarcely, I think, of any bird—from it. Nor was our luck much better at Stafnes, where we dug down through a large heap, coming upon fishes' bones in great abundance, but little of interest excepting a stratum of broken egg-shells, apparently those of Guillemots and Razor-bills, with perhaps a few Eider Ducks', though I have not yet examined them very closely. It was remarkable that such of the fragments as had any markings retain them still, after so long a burial, quite as brightly as specimens I have often seen in cabinets, when the collector has not been careful to exclude air and light. At Kyrkjuvogr we were more fortunate; in the wall of the churchyard we found two or three Great Auks' bones sticking in the turf, which is used instead of mortar to keep the stones in their places. On inquiry the turf was found to have been cut from a small hillock close by. This we pretty thoroughly searched, and among a vast number of the bones of other *Alcidae*, there were several of the large species.

But our most profitable digging was at Bæjasker. Mr. Wolley

one day as he was riding along called out to me that he saw two Gare-fowls' bones lying on the ground. On getting off his horse he found them to be the distal ends of the *humeri*, and apparently a pair. Going to the spot, I picked up a *radius*, also of a Gare-fowl, the first we had found anywhere. We carefully examined the locality on two other occasions, and found remains which must have belonged to at least eight individual birds. Many of them bore marks of the knife, and nearly all were in good preservation. They were chiefly lying under stones, which seemed once to have formed an old boundary-wall, and had probably been contained in the turf from some still more ancient rubbish-heap with which the wall had been built up. Just on this spot the sea appears to have encroached, and in this manner laid bare the two bones whose discovery led to the detection of the rest. Among the specimens we collected there are several in which certain differences, probably the result of age or sex, are observable. I do not intend to describe them now. I will merely remark that the Great Auk is rendered incapable of flight by the modification of the extremities only of its wings. While its *humerus* is in proportion with the bulk of the body, and fully twice the length that it is in the Razor-bill, the *ulna*, *radius*, and *metacarpus* are nearly the same length in both species, only much thickened in the Gare-fowl*.

It will be gathered from what has been above said that I think there is yet a chance of the Great Auk still existing in Iceland. At all events until it is proved that he is not to be found on the Geirfugladránger, I think he must not be despaired of; but I know of no other locality where he is likely to be. The numerous islets in the Breida-fjorðr which have been suggested as affording him possibly a last station, are, I believe, visited every year by people from the neighbourhood. Those who imagine he may be on the opposite coast of Greenland are,

* Mr. Edward Blyth gives a few interesting particulars about some bones of *Alca impennis* in the 'Proceedings' of the Zoological Society for 1837 (p. 122). I think it is likely enough that the specimens he examined were extracted from the skins prepared in 1834 by Jomfrue Lewer, which I have mentioned. At all events, that lady seems to have left more of the bones in the skins she prepared than is the custom with other performers in Iceland.

I am sure, doomed to disappointment. That shore is almost always beset with ice, and dive admirably as the bird may, I have yet to learn that he can remain under water as long as a Seal or a Walrus. His then would be a poor sort of existence among closely-packed floes and crashing mountains of ice. Along the coast of Labrador nothing has been lately heard of him that I know of, and yet, if I am rightly informed, it is pretty generally every year visited by fishermen of various nations. The formerly known breeding-places in the Gulf of St. Lawrence and off the coast of Newfoundland are ascertained to be abandoned, and no wonder when we think of the annual massacres which used to be committed there*. Yet there may be still "some happier island in the watery waste" to which the Penguins of the western seas may have escaped; but then, we may rely upon it, there is left a scanty remnant only.

I have been informed by my good friend Colonel Drummond-Hay, that in December 1852, in passing over the tail of the Newfoundland banks, he saw what he fully believes to have been a Great Auk. At first he thought it was a Northern Diver; but he could see the large bill and white patches, which left no doubt on his mind. The bird dived within thirty or forty yards of the steamer. The same gentleman also has sent me a letter received by him in 1854 from the late Mr. J. MacGregor, of St. John's, Newfoundland, in which he encloses a succinct account of the former wanton destruction of these birds by the fishermen—the heaps of bones and the 'pounds' now to be seen on some of their old breeding-places—and states that in the preceding year (1853) a dead one was picked up in Trinity Bay. My in-

* I am under the necessity of dissenting from the opinion expressed by Professor Owen, in a lecture delivered at the Royal Institution. April 12, 1859, and repeated in his article on 'Palæontology,' as republished in a separate form from the 'Encyclopædia Britannica' (p. 400). To the destruction which the Great Auk has experienced at the hands of man, must, I am confident, its gradually increasing scarcity be attributed. Granting that it does require very peculiar breeding-places to be fit and favourable for it, we only know of the disappearance of one such in the whole extent of its range, which in comparatively modern times reached from Cape Cod to Papa Westra, while on every other known breeding-place it has, from the earliest date, been the especial object of search.

quiries about this specimen have not yet resulted in obtaining any further information respecting it*.

I am well aware that nothing but the extraordinary interest that attaches to this bird warrants me in occupying so much space. It must be remembered that it is not merely a matter with which ornithologists only are concerned, but is one of far higher and more general importance. "A consideration of such instances of modern partial or total extinctions," says Professor Owen (*loc. cit.*) in reference to this very case, "may best throw light on, and suggest the truest notions of, the causes of ancient extinctions." If this be not sufficient excuse for me, I must urge the great difficulty I have had in condensing the numerous particulars of information which Mr. Wolley's labours have placed at my disposal. It would have been far easier to have been more diffuse. In Iceland all, with but one exception, were eager to tell us all they knew, and that in the most careful

* While on the subject of the bird's occurrence in this part of the world, I wish to remark on Mr. Cassin's statement in Prof. Baird's 'Birds of America' (p. 901), touching the Great Auk "figured by Mr. Audubon, and obtained by him on the banks of Newfoundland," &c. Now in 1857 I was assured by Mr. Bell, the well-known taxidermist at New York, who knew Mr. Audubon intimately, that he never possessed but one specimen of this bird; and if we turn to Prof. MacGillivray's 'History of British Birds' (vol. v. p. 359), we find him saying that he never saw but two examples of the species, one in the British Museum, and "the other belonging to Mr. Audubon, and procured by him in London." I have also to set right a mistake made on this side of the water. In their Catalogue of Norfolk and Suffolk Birds, printed in the 'Linnean Transactions' (xv. p. 61), Messrs. Shepherd and Whitear say, they had been told by Sir William Hooker that a Great Auk had been "killed near Southwold" in the latter county. That eminent botanist, however, has most kindly informed me that not only has he no recollection of any such occurrence, but, having taken some trouble to inquire about it, he is satisfied that the statement originated in error. I must add further, that the reported instance of a bird taken near Marlow in Buckinghamshire, on the estate of Sir William Clayton, first published, I think, by Dr. Fleming (*Brit. Anim.* p. 130), on Mr. Bullock's authority, seems to me very unlikely. On the other hand, I may mention that Sir William Milner tells me that within the last few years he has become possessed of a fine Great Auk, which he has reason to believe was killed in the Hebrides. This bird, I am informed, was found to have been stuffed with turf.

manner. I have already mentioned several persons from whom we obtained valuable intelligence, and unjust as it may appear to the rest, I must forbear from naming more. The chief authorities both in church and state afforded us every facility, and all orders and degrees of men and women followed their example. From the Governor surrounded by the comforts of modern civilization through every grade to the unhappy leper, dwelling, as his ancestors may have done centuries ago, amid filth and scarcity, we received an amount of attention, of which it is difficult to express the full value without seeming guilty of exaggeration. Alas that it is left to me only to make this statement! To all those concerned, then, I have to return our acknowledgments, and to no one more than to our honest and intelligent guide and interpreter Geir Zoega of Reykjavik, who for more than two months was our constant and willing attendant.

Whether the Gare-fowl be already extirpated or still existing in some unknown spot, it is clear that its extinction, if not already accomplished, must speedily follow on its rediscovery. I have therefore to beseech all who may be connected with the matter to do their utmost that such rediscovery should be turned to the best account. If in this point we neglect our opportunities, future naturalists will justly reproach us. The mere possession of a few skins or eggs, more or less, is as nothing. Our science demands something else—that we shall transmit to posterity a less perishable inheritance. I have to urge, in no spirit of partiality, but purely in the cause of knowledge, the claims of our own country in this event. Our metropolis possesses the best-stocked vivarium in the world. An artist residing among us is unquestionably the most skilful animal draughtsman of this or any other period. By common consent the greatest comparative anatomist of the day is the naturalist who superintends the nation's zoological collection. Surely no more fitting repository for the very last of the Great Auks could be found than the Gardens of the Zoological Society of London, where living they would be immortalized by Mr. Wolf's pencil, and dead be embalmed in a memoir by Professor Owen's pen.

Elveden, August 8, 1861.